PRODUCTION COMPANY
A Subsidiary of Inland Resources Inc.

January 15, 2002

State of Utah
Division of Oil, Gas & Mining
Attn: Brad Hill
1594 West North Temple - Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Applications for Permit to Drill: 1-32-8-18, 7-32-8-18, 8-32-8-18, 9-32-8-18, 11-32-8-18, 12-32-8-18, 13-32-8-18, 14-32-8-18, 15-32-8-18, and 16-32-8-18.

Dear Brad:

Enclosed find APD's on the above referenced wells. Please call Brad Mecham at (435) 646-3721 to schedule on-sites. If you have any questions, feel free to give either Brad or myself a call.

Sincerely,

Mandie Crozier

Mandie Crozier
Permit Clerk

mc
enclosures

001

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML-22058	6. SURFACE: State
1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
B. TYPE OF WELL: OIL ☑ GAS ☐ OTHER _____ SINGLE ZONE ☑ MULTIPLE ZONE ☐	8. UNIT or CA AGREEMENT NAME: N/A
2. NAME OF OPERATOR: Inland Production Company	9. WELL NAME and NUMBER: Sundance 15-32-8-18
3. ADDRESS OF OPERATOR: Route #3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER: (435) 646-3721	10. FIELD AND POOL, OR WILDCAT: ~~Monument Butte~~ 8 mile Flat North
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: SW/SE 552' FSL 2191' FEL 4435781 N 572519 E AT PROPOSED PRODUCING ZONE:	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 32 T8S 18E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: Approximately 21.7 miles southeast of Myton, UT	12. COUNTY: Uintah 13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) Approximately 552' f/lse line	16. NUMBER OF ACRES IN LEASE: 640 acres
	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) Approximately 1685'	19. PROPOSED DEPTH: 6,500
	20. BOND DESCRIPTION: Hartford Accident #4471291
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 4908.5 GR	22. APPROXIMATE DATE WORK WILL START: 4/1/2002
	23. ESTIMATED DURATION: 7 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4	8 5/8	J-55	24#	290	Class G Cement	155sx +/-10% 1.17 Cu Ft/sk	15.8 PPG
7 7/8	5 1/2	J-55	15.5#	6,500	Premium Lite II	275sx lead 3.43 Cu Ft/sk	11.0 PPG
					Class G Cement	450sx tail 1.59 Cu Ft/sk	14.2 PPG

RECEIVED
JAN 17 2002
DIVISION OF
OIL, GAS AND MINING

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
☐ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
☑ COMPLETE DRILLING PLAN
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Mandie Crozier TITLE Permit Clerk

SIGNATURE Mandie Crozier DATE 1/15/02

(This space for State use only)

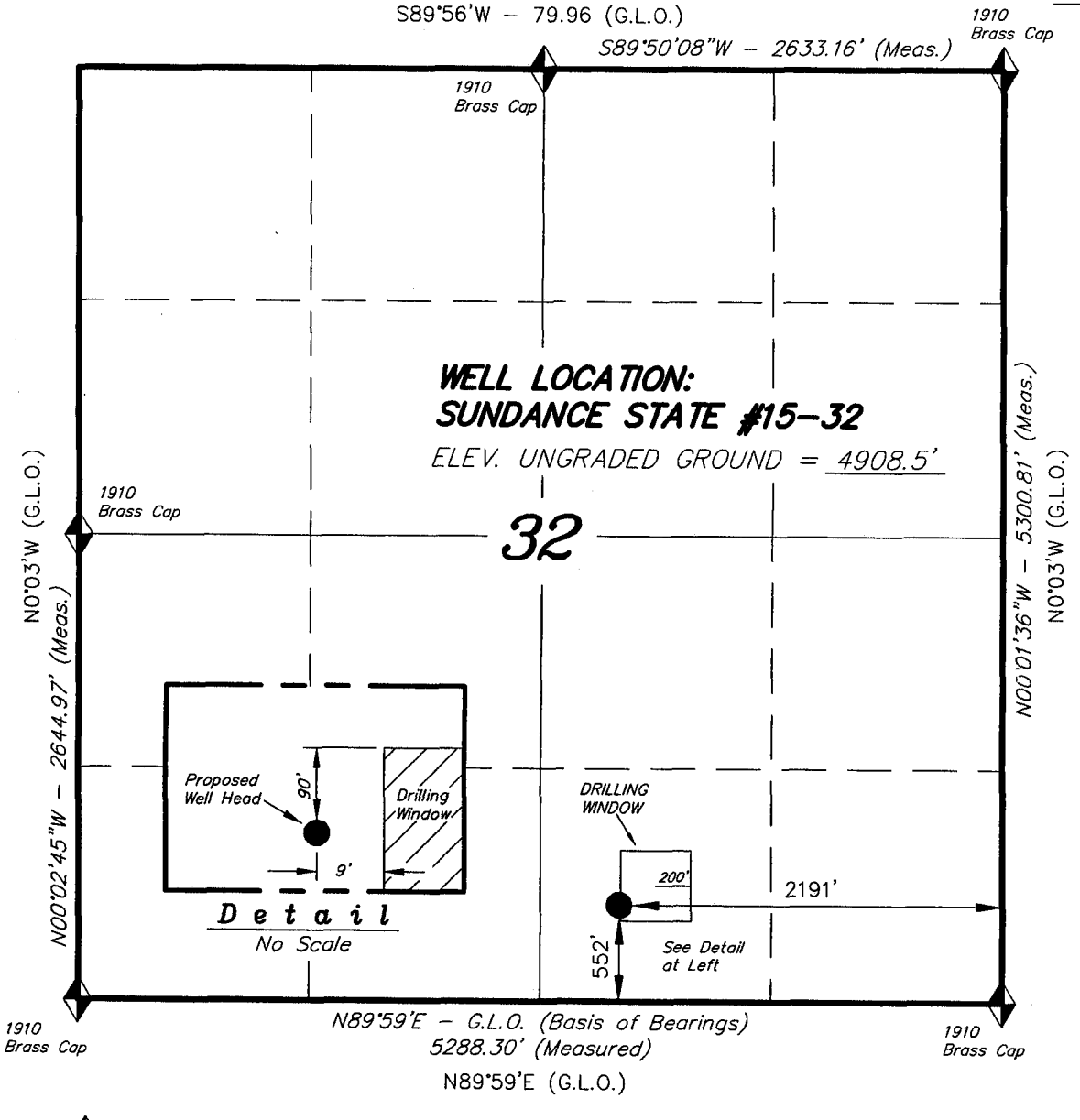
API NUMBER ASSIGNED: 43-047-34465

APPROVAL:

Approved by the
Utah Division of
Oil, Gas and Mining
Date: 03-14-02
By:

(11/2001) (See Instructions on Reverse Side)

T8S, R18E, S.L.B.&M.



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

INLAND PRODUCTION COMPANY

WELL LOCATION, SUNDANCE STATE #15-32, LOCATED AS SHOWN IN THE SW 1/4 SE 1/4 OF SECTION 32, T8S, R18E, S.L.B.&M. UINTAH COUNTY, UTAH.

N

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
No. 189377
STACY W. STEWART
STATE OF UTAH

REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

TRI STATE LAND SURVEYING & CONSULTING
38 WEST 100 NORTH – VERNAL, UTAH 84078
(435) 781-2501

SCALE: 1" = 1000'	SURVEYED BY: D.J.S.
DATE: 12-18-01	DRAWN BY: J.R.S.
NOTES:	FILE #

INLAND PRODUCTION COMPANY
SUNDANCE 15-32-8-18
SW/SE SECTION 32, T8S, R18E
UINTAH COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0 – 1700'
Green River	1700'
Wasatch	6500'

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation 1700' – 6500' – Oil

4. **PROPOSED CASING PROGRAM:**

Surface Casing: 8-5/8" J-55 24# w/ST&C collars; set at 290' (New)
Production Casing:5-1/2" J-55, 15.5# w/LT&C collars; set at TD (New or used, inspected).

5. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Series 900 Annular Bag type BOP and an 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

The well will be drilled with air mist system to 3200', then from 3200' +/- to TD a fresh water/polymer system will be utilized. If necessary, to control formation fluids, the system will be weighted with the addition of bentonite gel, and if conditions warrant, barite. This fresh water system typically will contain Total Dissolved Solids (TDS) of less than 3000 PPM. Neither potassium chloride nor chromates will be utilized in the fluid system. The anticipated mud weight is 8.4 ppg and weighted as necessary for gas control.

AIR DRILLING

In the event that the proposed location is to be "Air Drilled", Inland requests a variance to regulations requiring a straight run blooie line. Inland proposes that the flowline will contain two (2) 90-degree turns. Inland also requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line. Inland requests authorization to ignite as needed, and the flowline at 80'.

Inland Production Company requests that the spark arrest, exhaust, or water cooled exhaust be waived under the Special Drilling Operations of Onshore Order #2.

MUD PROGRAM	MUD TYPE
Surface – 3200'	fresh water or air/mist system
3200' – TD'	fresh water system

From surface to ± 3200 feet will be drilled with either fresh water or an air/mist system, depending on the drilling contractor's preference. From about 3200 feet, or in the case of the air/mist system when hole conditions dictate, to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCL substitute additive. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite. No chromate additives will be used in the mud system.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 290' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

The anticipated maximum bottom hole pressure is 2000 psi. It is not anticipated that abnormal temperatures will be encountered; or that any other abnormal hazards such as H2S will be encountered in this area.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence the first quarter of 2002, and take approximately seven (7) days from spud to rig release.

INLAND PRODUCTION COMPANY
SUNDANCE 15-32-8-18
SW/SE SECTION 32, T8S, R18E
UINTAH COUNTY, UTAH

THIRTEEN POINT SURFACE PROGRAM

1. EXISTING ROADS

See attached **Topographic Map "A"**

To reach Inland Production Company well location site Sundance 15-32-8-18 located in the SW¼ SE¼ Section 32, T8S, R18E, S.L.B. & M., Uintah County, Utah:

Proceed in a southwesterly direction out of Myton, Utah along Highway 40 approximately 1.6 miles to the junction of this highway and Utah State Highway 53; proceed southeasterly along Utah State Highway 53 approximately 13.8 miles to its junction with an existing road to the north; proceed northerly 0.3 miles to its junction with an existing road to the east; proceed northeasterly approximately 6.0 miles to its junction with the beginning of the proposed access road; proceed southeasterly along the proposed access road approximately 1,440' to the proposed well location.

The highways mentioned in the foregoing paragraph are bituminous surfaced roads to the point where Highway 216 exists to the South, thereafter the roads are constructed with existing materials and gravel. The highways are maintained by Utah State road crews. All other roads are maintained by County crews.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal.

2. PLANNED ACCESS ROAD

Approximately 1,440' ± of access road is proposed. See attached **Topographic Map "B"**.

The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%.

There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. **LOCATION OF EXISTING WELLS**

Refer to **EXHIBIT B.**

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted Desert Tan. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Fresh water purchased from the Johnson Water District will be used for drilling. A temporary poly pipeline may be used for water transportation from our existing supply line from Johnson Water District, or trucked from Inland Production Company's injection facilities – **EXHIBIT A.**

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

Immediately upon first production, all produced water will be confined in storage tanks. Inland requests temporary approval to transfer the produced water to Inland's nearby waterflood, for re-injection into the waterflood reservoirs via existing approved injection wells. Within 90 days of

first production, a water analysis will be submitted to the Authorized Officer along with an application for approval of this, as a permanent disposal method.

8. **ANCILLARY FACILITIES:**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. **WELL SITE LAYOUT:**

See attached Location Layout Sheet.

Fencing Requirements

All pits will be fenced according to the following minimum standards:

a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.

b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.

c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times

d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.

e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

10. **PLANS FOR RESTORATION OF SURFACE:**

a) **Producing Location**

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) **Dry Hole Abandoned Location**

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. **SURFACE OWNERSHIP:** State of Utah

12. **OTHER ADDITIONAL INFORMATION:**

a) Inland Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Inland is to immediately stop work that might further disturb such materials and contact the Authorized Officer.

b) Inland Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.

c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

The Archaeological Cultural Resource Survey is enclosed.

Additional Surface Stipulations

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

Hazardous Material Declaration

Inland Production Company guarantees that during the drilling and completion of the Sundance 15-32-8-18, Inland will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Inland also guarantees that during the drilling and completion of the Sundance 15-32-8-18 Inland will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Inland Production Company or a contractor employed by Inland Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

The State office shall be notified upon site completion prior to moving on the drilling rig.

13. **LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:**

Representative

Name:	Brad Mecham
Address:	Inland Production Company
	Route 3, Box 3630
	Myton, UT 84052
Telephone:	(435) 646-3721

Certification

Please be advised that INLAND RESOURCES, INC. is considered to be the operator of well #15-32-8-18, SW/SE Section 32, T8S, R18E, LEASE #ML-22058, Uintah County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4471291.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Inland Resources, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

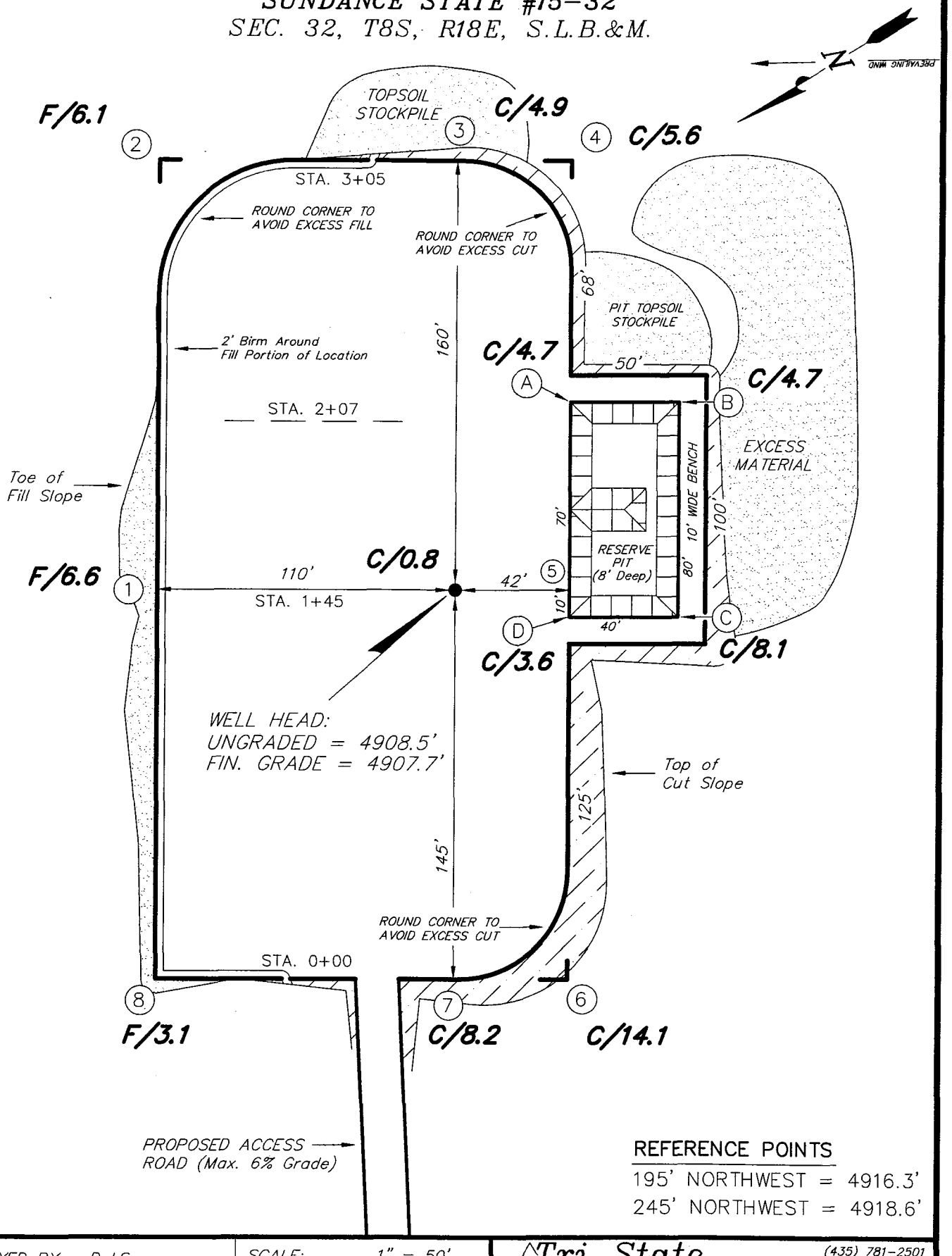
1/15/02
Date

Mandie Crozier
Permit Clerk
Inland Production Company

INLAND PRODUCTION COMPANY

SUNDANCE STATE #15-32

SEC. 32, T8S, R18E, S.L.B.&M.



REFERENCE POINTS

195' NORTHWEST = 4916.3'

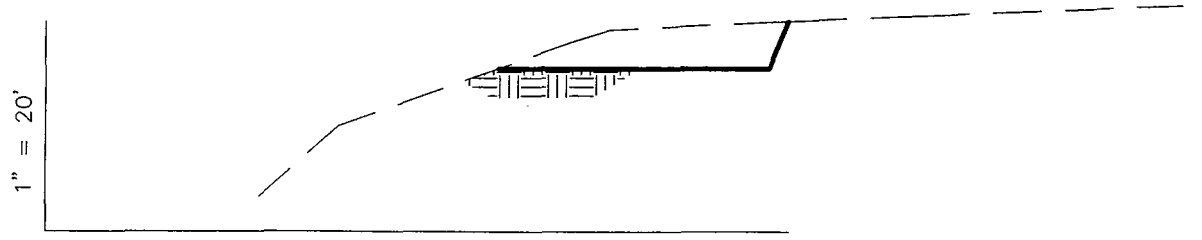
245' NORTHWEST = 4918.6'

SURVEYED BY: D.J.S.	SCALE: 1" = 50'	Tri State Land Surveying, Inc.	(435) 781-2501
DRAWN BY: J.R.S.	DATE: 12-18-01	38 WEST 100 NORTH VERNAL, UTAH 84078	

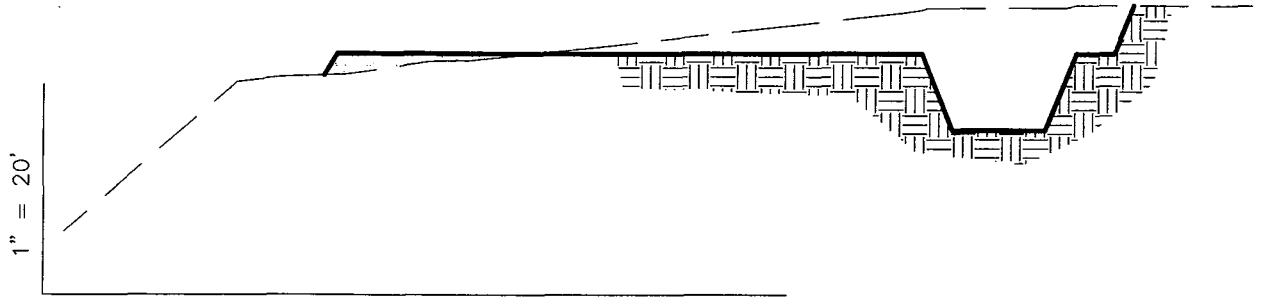
INLAND PRODUCTION COMPANY

CROSS SECTIONS

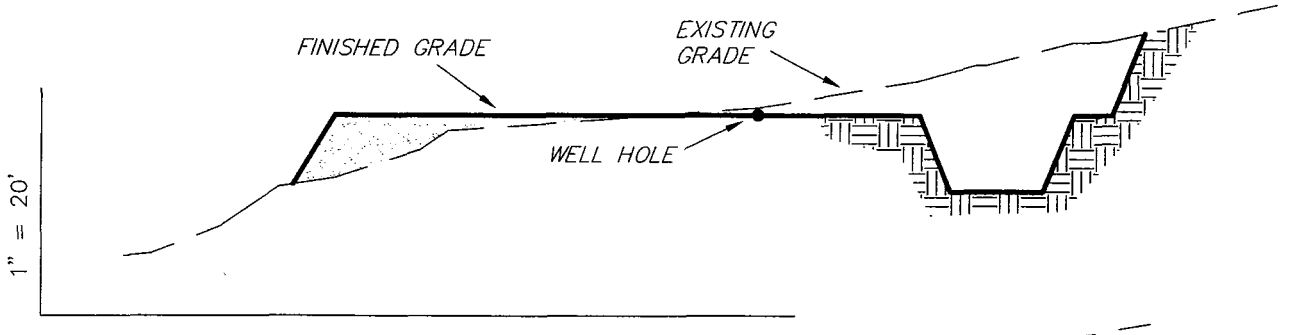
SUNDANCE STATE #15-32



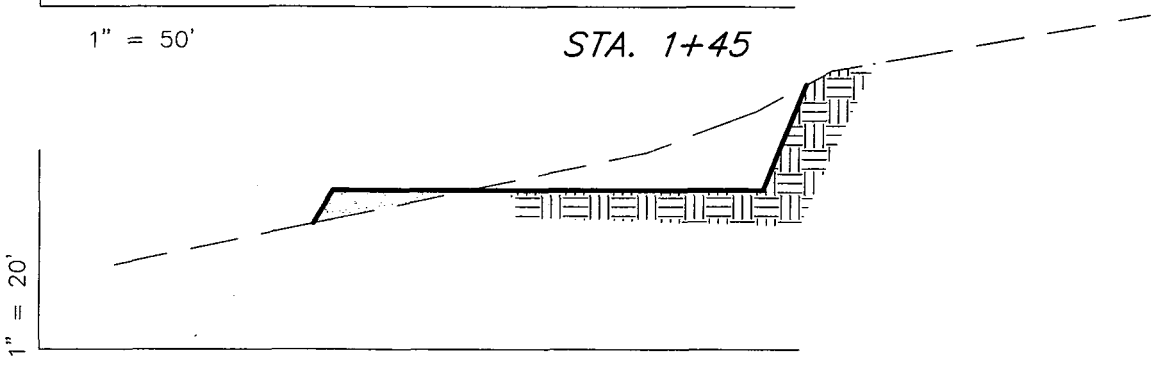
STA. 3+05



STA. 2+07



STA. 1+45



STA. 0+00

NOTE:
UNLESS OTHERWISE NOTED ALL CUT SLOPES ARE AT 1:1. FILL SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES
(Expressed in Cubic Yards)

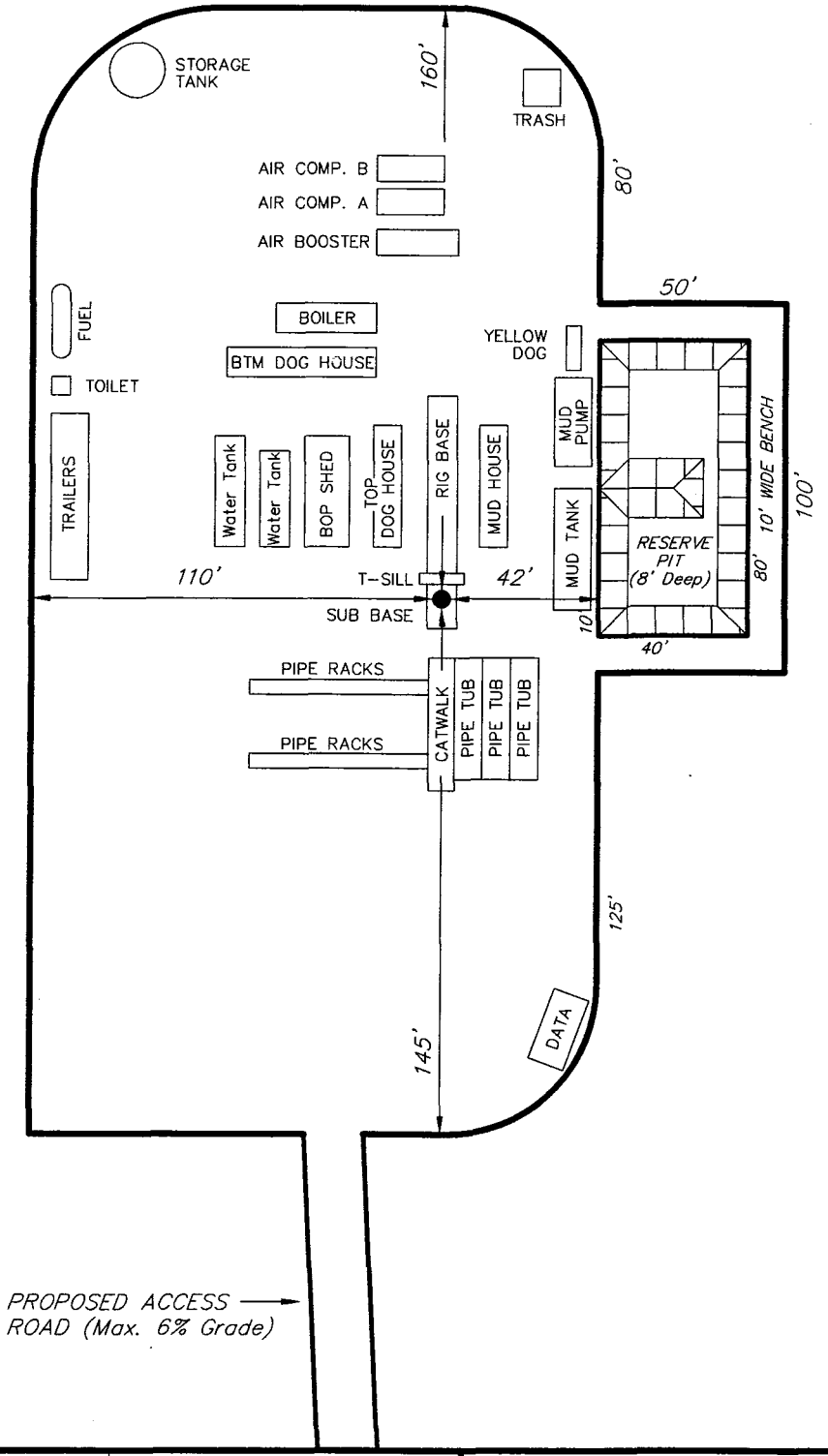
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	4,810	1,550	Topsoil is not included in Pad Cut	3,260
PIT	640	0		640
TOTALS	5,450	1,550	1,010	3,900

SURVEYED BY: D.J.S.	SCALE: 1" = 50'	Tri State Land Surveying, Inc.	(435) 781-2501
DRAWN BY: J.R.S.	DATE: 12-18-01	38 WEST 100 NORTH VERNAL, UTAH 84078	

INLAND PRODUCTION COMPANY

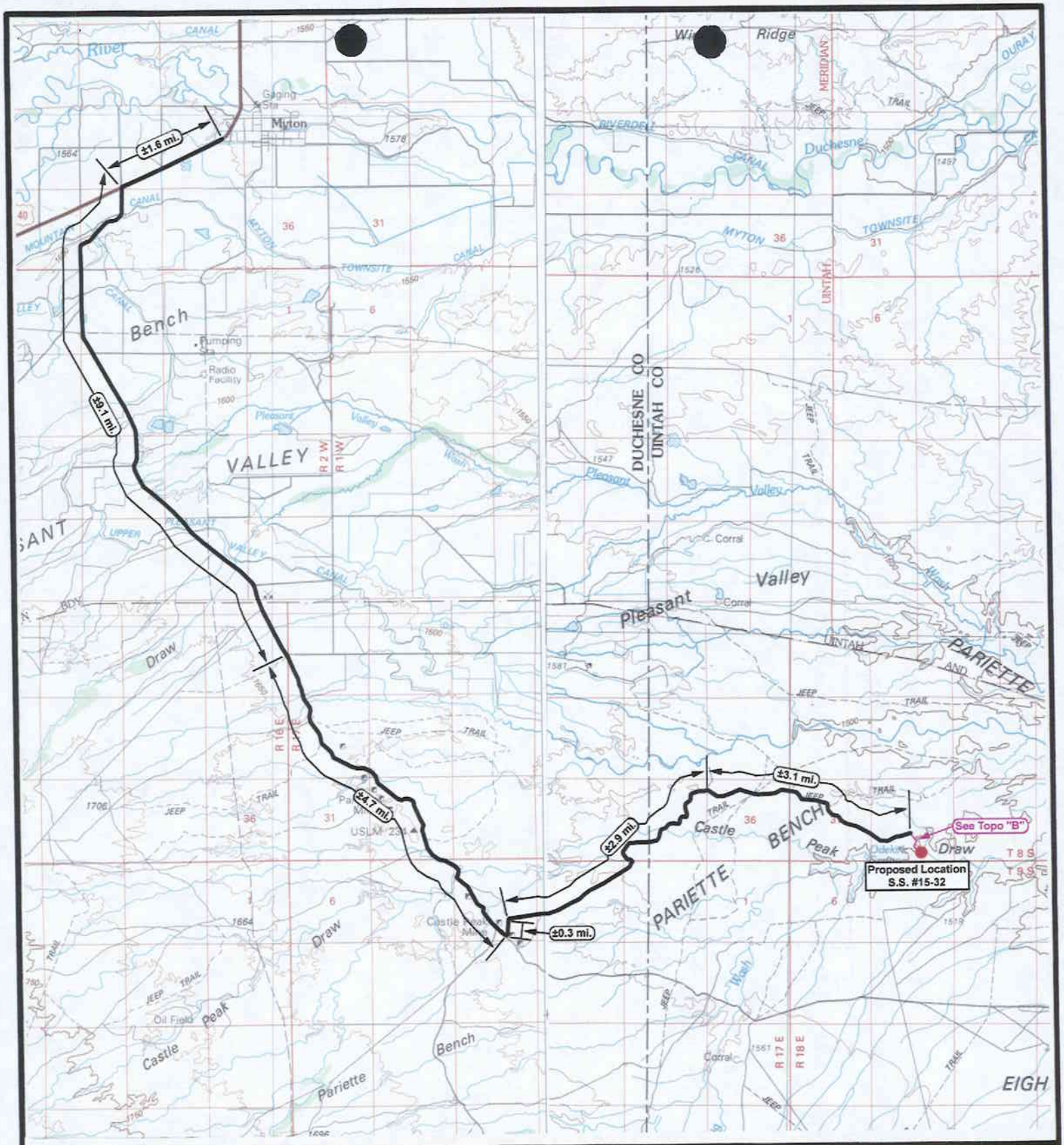
TYPICAL RIG LAYOUT

SUNDANCE STATE #15-32



SURVEYED BY:	D.J.S.	SCALE:	1" = 50'
DRAWN BY:	J.R.S.	DATE:	12-18-01

Tri State Land Surveying, Inc.
(435) 781-2501
38 WEST 100 NORTH VERNAL, UTAH 84078



Inland RESOURCES INC.

Sundance State #15-32
SEC. 32, T8S, R18E, S.L.B.&M.

N

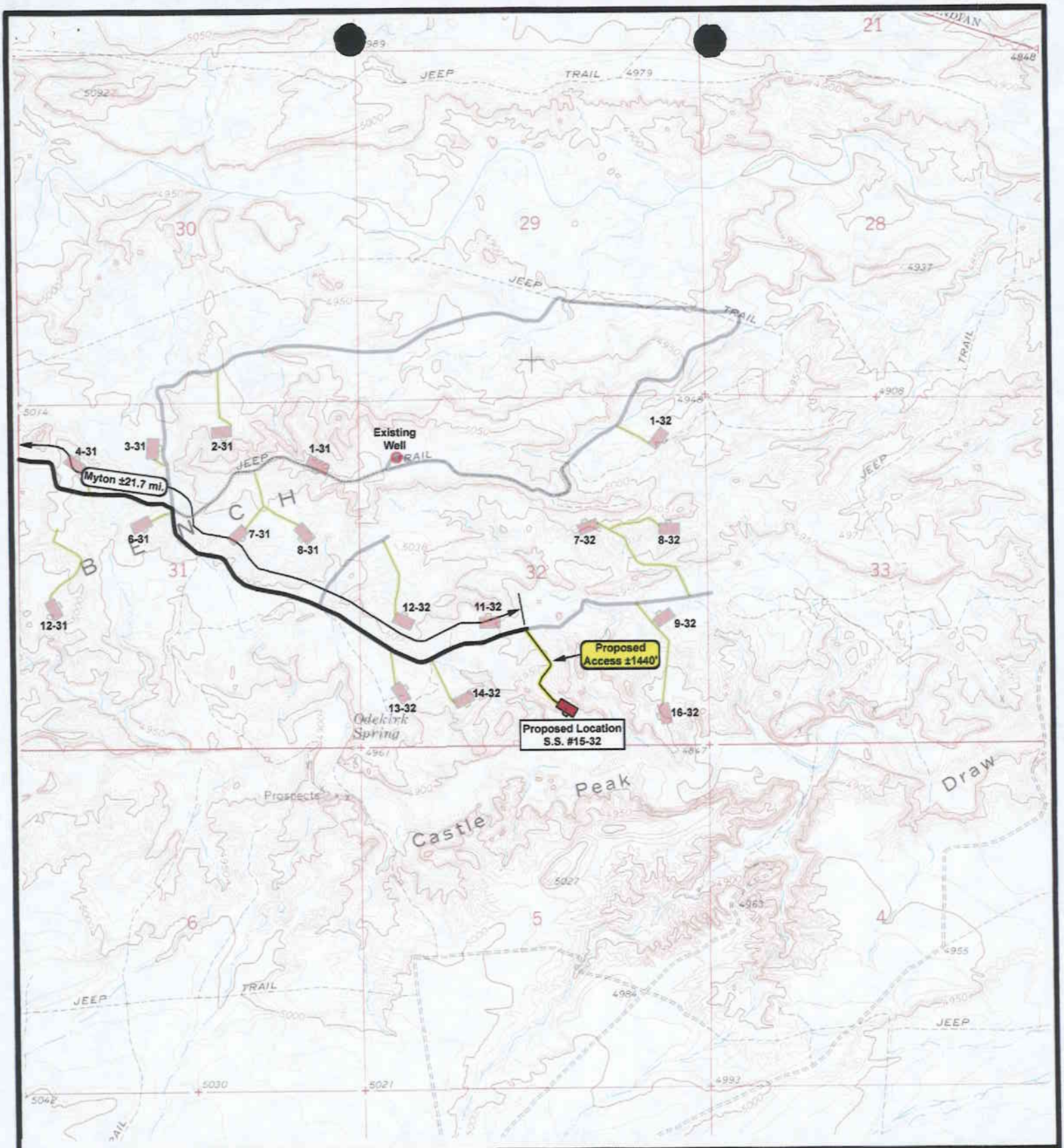
Tri-State Land Surveying Inc.
(435) 781-2501
38 West 100 North Vernal, Utah 84078

SCALE: 1" = 2000'
DRAWN BY: D.J.
DATE: 12-19-2001

Legend

Existing Road
Proposed Access

TOPOGRAPHIC MAP
"A"



Inland RESOURCES INC.

Sundance State #15-32
SEC. 32, T8S, R18E, S.L.B.&M.

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Tri-State Land Surveying Inc.
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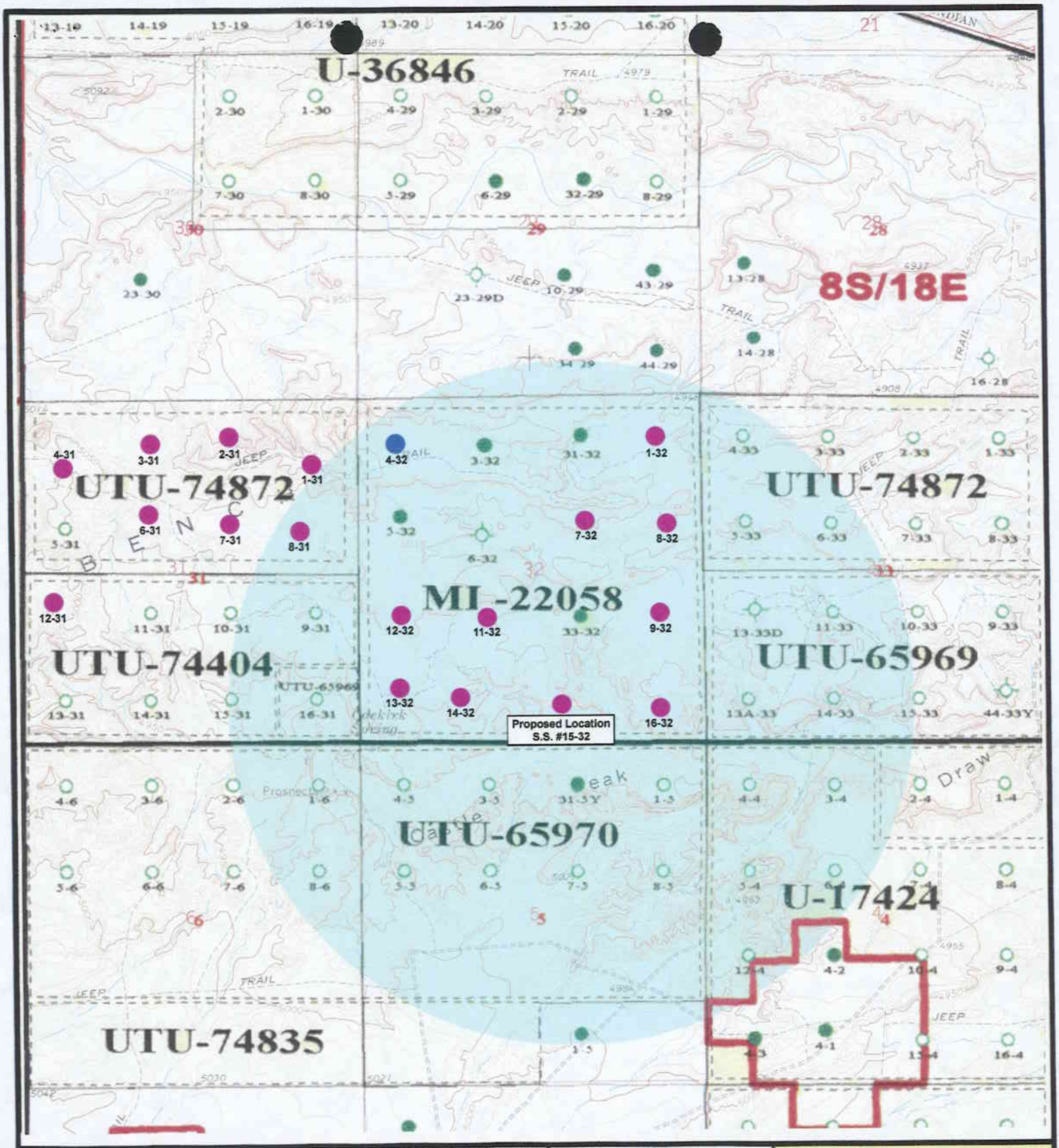
SCALE: 1" = 2000'
DRAWN BY: D.J.
DATE: 12-19-2001

Legend

- Existing Road
- Proposed Access
- Access to be Upgraded

TOPOGRAPHIC MAP "B"



Inland RESOURCES INC.

Sundance State #15-32
SEC. 32, T8S, R18E, S.L.B.&M.

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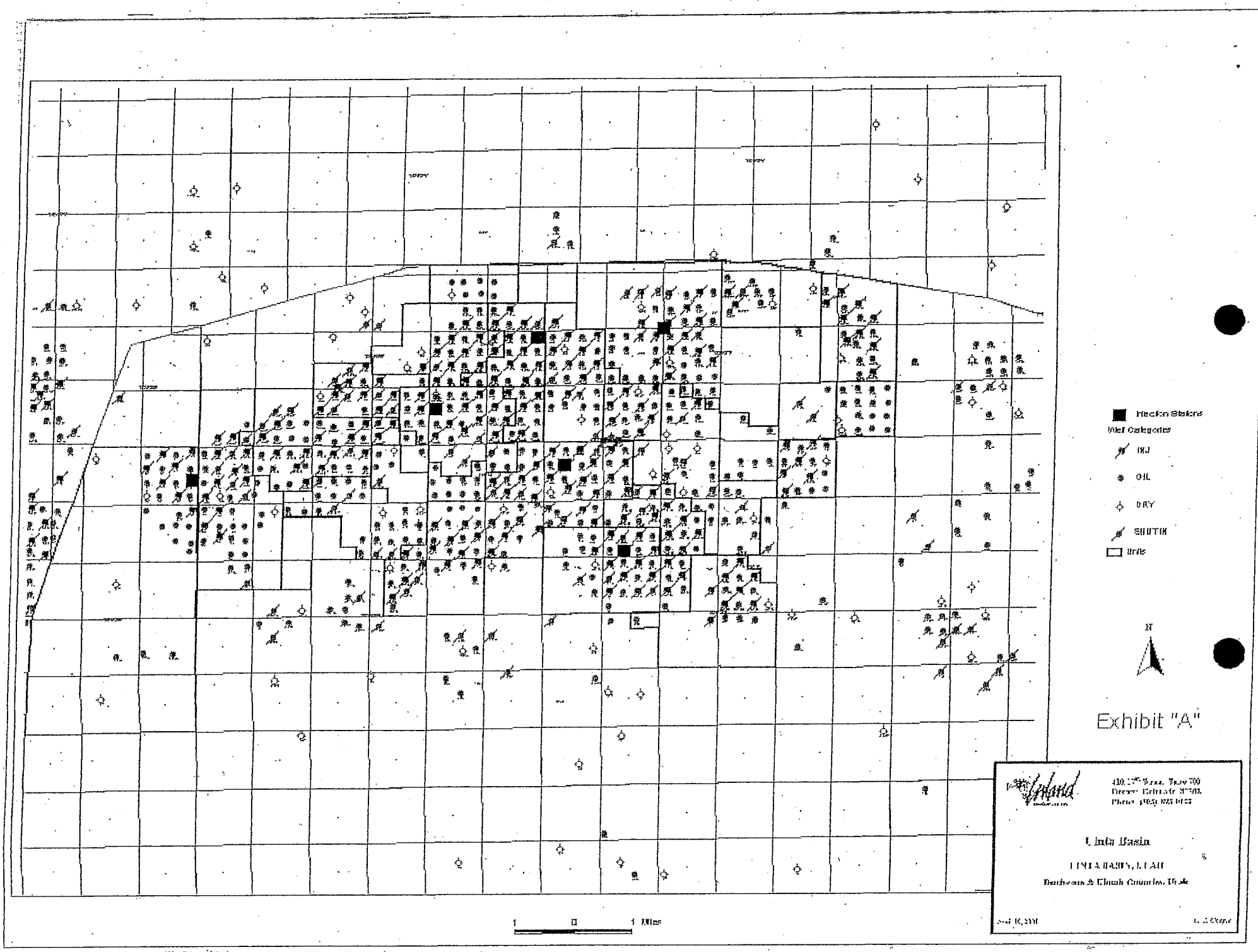
Tri-State Land Surveying Inc.
(435) 781-2501
38 West 100 North Vernal, Utah 84078

SCALE: 1" = 2000'
DRAWN BY: D.J.
DATE: 12-19-2001

Legend

- Existing Wells
- Proposed Locations
- One Mile Radius

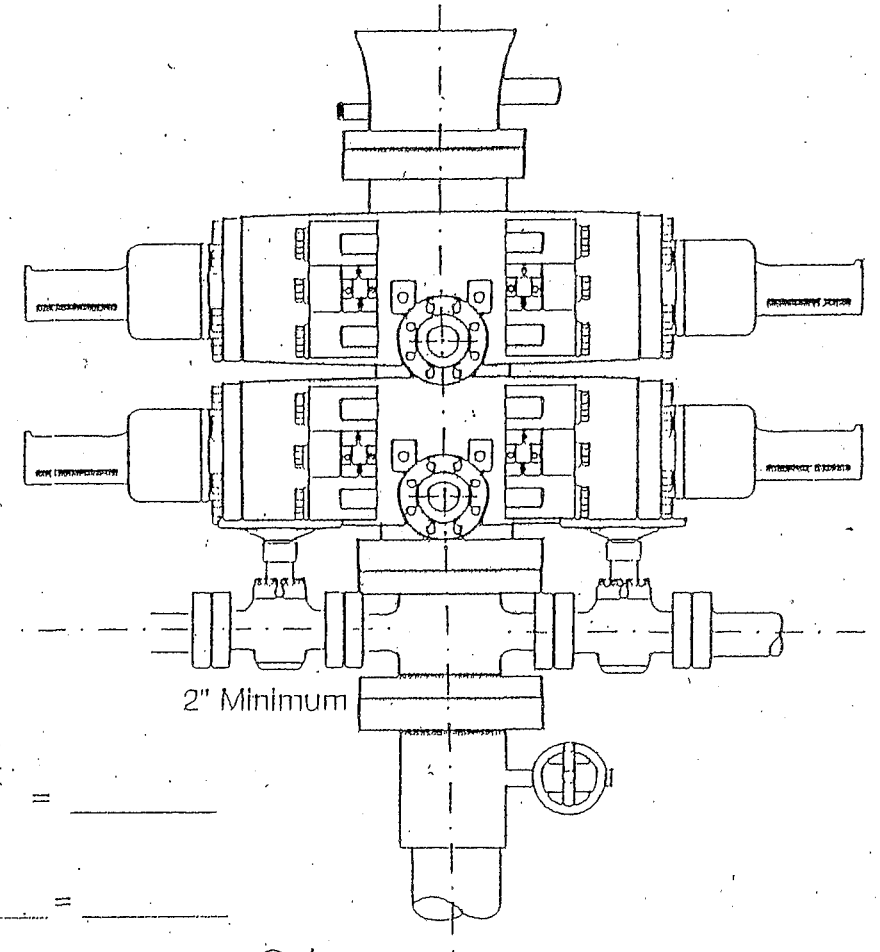
Exhibit "B"

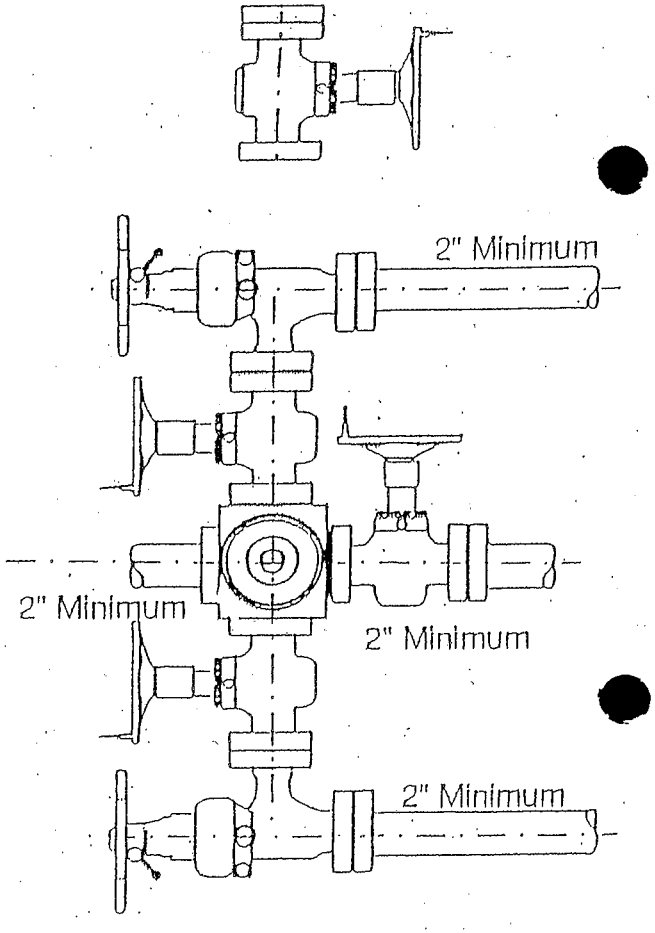

Hachn Stakes
Well Categories
INJ
OIL
DRY
SHUTIN
Units
N
Exhibit "A"
Uinta Basin
UINTAH BASIN, UTAH
Duchesne & Uintah Counties, Utah
1 0 1 Miles

RAM TYPE B.O.P.
Make:
Size:
Model:

2-M SYSTEM

EXHIBIT "C"





GAL TO CLOSE
Annular BOP = _____
Ramtype BOP
____Rams x _____ = _____

= _____Gal.

_____ x 2 = _____ Total Gal.

Rounding off to the next higher
increment of 10 gal. would require
___ __ Gal. (total fluid & nitro volume)

CULTURAL RESOURCE INVENTORY OF INLAND RESOURCES' ODEKIRK UNIT, TOWNSHIP 8S, RANGE 18E, SECTION 32, UINTAH COUNTY, UTAH

Keith R. Montgomery
and
Sarah Ball

CULTURAL RESOURCE INVENTORY OF INLAND RESOURCES' ODEKIRK UNIT, TOWNSHIP 8S, RANGE 18E, SECTION 32, UINTAH COUNTY, UTAH

by

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Prepared For:

State of Utah
School and Institutional Trust
Land Administration

Prepared Under Contract With:

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MOAC Report No. 01-177

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United States Department of Interior (FLPMA)
Permit No. 01-UT-60122

State of Utah Antiquities Project (Survey)
Permit No. U-01-MQ-00739s

ABSTRACT

A cultural resource inventory was conducted by Montgomery Archaeological Consultants (MOAC) of Inland Resources' Odekirk Unit in Township 8S, Range 18E, Section 32, Uintah County, Utah. Inland Resources proposes to develop oil/gas well locations, access roads, and pipelines in this 480-acre block. The project area occurs on land administered by the State of Utah, School and Institutional Trust Land Administration (SITLA).

The inventory of the project area resulted in the documentation of eleven new prehistoric sites (42Un2947 to 42Un2957) and the recordation of six isolated finds of artifacts (IF-A through IF-F). Nine of the eleven sites are lithic procurement localities (42Un2947, 42Un2948, 42Un2950, 42Un2951, 42Un2952, 42Un2953, 42Un2954, 42Un2955, and 42Un2956). These sites include lithic debitage and cores of local material, as well as bifaces, utilized flakes, scrapers, and hammerstones. One of the sites, 42Un2948 also includes a single-handed sandstone mano. Two lithic scatters were documented (42Un2949 and 42Un2957), consisting of lithic debitage and a few lithic tools. The isolated finds (IF-A through IF-F) include an aqua-colored glass whiskey bottle, lithic flakes, cores, a hammerstone, and a Stage III biface.

Three of the lithic procurement sites (42Un2948, 42Un2950 and 42Un2954) are recommended eligible to the NRHP under criterion D. These sites, although surficial, exhibit a variety of tools (cores, bifaces, hammerstones, and a mano) as well as the spatial pattering of artifacts. Additional investigations at these sites is likely to contribute to the prehistoric research domains of the area. Eight of the prehistoric sites (42Un2947, 42Un2949, 42Un2951, 42Un2952, 42Un2953, 42Un2955, 42Un2956, and 42Un2957) are evaluated as not eligible for inclusion to the NRHP. They are limited activity sites lacking temporal indicators, spatial patterning, and features; hence they fail to possess additional information relevant to the prehistoric research domains of the area.

The inventory of Inland Resources' Odekirk Unit resulted in the documentation of three prehistoric sites (42Un2948, 42Un2950 and 42Un2954) that are considered eligible to the NRHP. It is recommended that these sites be avoided by the undertaking. Based on the adherence to this recommendation, a determination of "no historic properties affected" pursuant to Section 106, CFR 800 is proposed for this project.

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INTRODUCTION

In November 2001, a cultural resource inventory was conducted by Montgomery Archaeological Consultants (MOAC) of Inland Resources' Odekirk Unit, in Township 8S, Range 18E, Section 32. The project area occurs approximately 19 miles southeast of Myton, Uintah County, Utah. Inland Resources, Inc. proposes to develop oil/gas well locations, access roads, and pipelines in this 480-acre block. The inventory was implemented at the request of Mr. Jon Holst, permitting agent for Inland Resources. The project area occurs on land administered by the State of Utah, School and Institutional Trust Land Administration (SITLA).

The objective of the inventory was to locate, document and evaluate any cultural resources within the project area. This project is carried out in compliance with Federal and State legislation including the Antiquities Act of 1906, the National Historic Preservation Act (NHPA) of 1966 (as ammended), the National Environmental and Historic Preservation Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, and the American Indian Religious Freedom Act of 1978.

The fieldwork was directed by Keith R. Montgomery (Principal Investigator) and assisted by Sarah Ball, Mark Beeson, Sharyl Kinnear-Ferris, Kathy Lamm, Greg Nunn, Anne Raney, and Roger Stash. The inventory was conducted under the auspices of U.S.D.I. (FLPMA) Permit No. 01-UT-60122 and State of Utah Antiquities Project (Survey) No. U-01-MQ-0739s.

A file search for previous projects and documented cultural resources was conducted by Keith Montgomery at the BLM Vernal Field Office (November 2, 2001) and by Sarah Ball at the Division of State History (November 13, 2001). This consultation indicated that a number of archaeological projects have been conducted in the area surrounding the project area. In 1981, Utah Archaeological Research Corporation conducted an inventory for Natural Gas Corporation, documenting a lithic scatter (42Un1237) (Cook 1982). Metcalf Archaeological Consultants, Inc. completed a survey of a well location and access road for PG&E Resources in 1994, finding two prehistoric isolated finds of artifacts (Scott 1994). In 1995, Sagebrush Archaeological Consultants inventoried five PG&E well pads near the project area and documented one archaeological site (no site number given) (Weymouth and Simmons 1994). In the following year Sagebrush Archaeological Consultants inventoried a well location and access road for Lomax Exploration Company finding no cultural resources (Murray 1995). No previously recorded cultural resources are situated in the immediate project area.

DESCRIPTION OF PROJECT AREA

The project area lies on Pariette Bench along the north side of Castle Peak Draw in the Uinta Basin. A 480-acre parcel was surveyed for proposed oil and gas development by Inland Resources. The legal description is Township 8S, Range 18E, Section 32 (Figure 1).

Topographically, this area consists of highly dissected sandstone and mudstone rock formations and broad sandy silt ridges (Stokes 1986). Recent alluvial deposits, older alluvial terrace deposits, and rock outcrops of the Upper Eocene Uinta Formation constitute the surface geology of the area. The Uinta Formation is seen as eroded outcrops formed by fluvial deposited stream laid interbedded sandstone and mudstone. This formation is known for its fossil vertebrates, including turtles, crocodilians, fish, and mammals. The elevation ranges from 4850 to 5100 feet a.s.l. Named water sources nearby include Pariette Draw, Castle Peak Draw, and Odekirk Spring. The project area lies within the Upper Sonoran life zone, dominated by a shadscale community intermixed with low sagebrush, mat saltbush, greasewood, rabbitbrush, snakeweed, prickly pear cactus, pincushion cactus, and grasses. A riparian zone exists along the washes, and includes cottonwood, Russian olive, and tamarisk. Modern disturbances to the landscape include well locations, access roads, pipelines, and livestock grazing.

Cultural Overview

The cultural-chronological sequence represented in the area includes the Paleoindian, Archaic, Fremont, Protohistoric, and Euro-American stages. The earliest inhabitants of the region are representative of the Paleoindian stage (ca. 12,000-8,000 B.P.). This stage is characterized by the adaptation to terminal Pleistocene environments and by the exploitation of big game fauna. The presence of Paleoindian hunters in the Uinta Basin region is implied by the discovery of Clovis and Folsom fluted points (ca.12,000 B.P. - 10,000 B.P.), as well as the more recent Plano Complex lanceolate points (ca. 10,000 B.P. - 7,000 B.P.). Near the project area, a variety of Paleoindian projectile points have been documented, including Goshen, Alberta, and Midland styles (Hauck 1998).

The Archaic stage (ca. 8,000 B.P.-1,500 B.P.) is characterized by the dependence on a foraging subsistence, with peoples seasonally exploiting a wide spectrum of plant and animal species in different ecozones. The shift to an Archaic lifeway was marked by the appearance of new projectile point types, and the development of the atlatl, perhaps in response to a need to pursue smaller and faster game (Holmer 1986). In the Uinta Basin, evidence of Early Archaic presence is relatively sparse compared to the subsequent Middle and Late Archaic periods. Early Archaic (ca. 6000-3000 B.C.) sites in the Basin

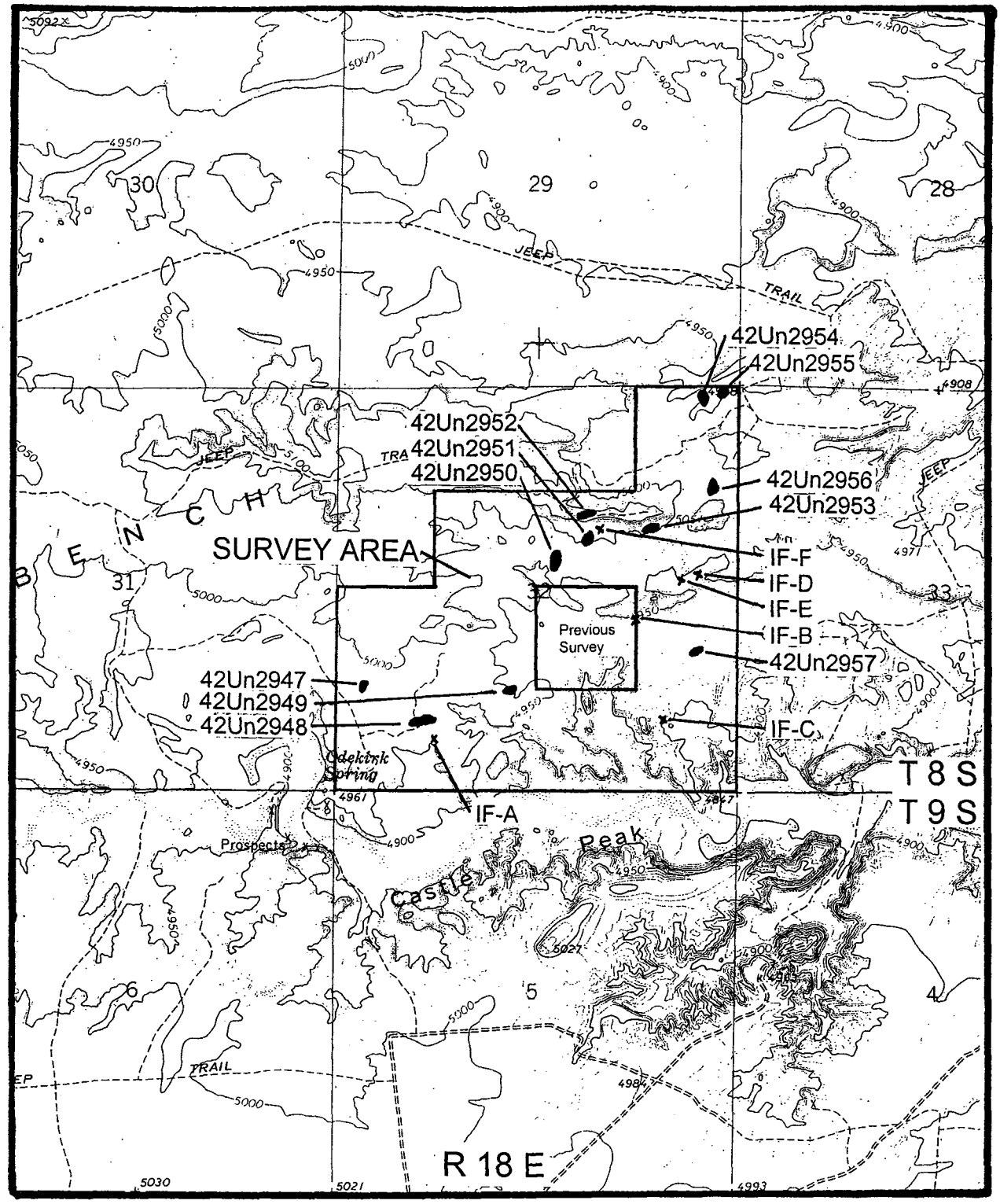

Figure 1. Inventory Area of Inland Resources Odekirk Unit in T 8S, R18E, Sec. 32 showing Cultural Resources. USGS 7.5' Pariette Draw SW, UT 1964. Scale 1:24000.

include sand dune sites and rockshelters primarily clustered in the lower White River drainage (Spangler 1995:373). Early Archaic projectile points recovered from Uinta Basin contexts include Pinto Series, Humboldt, Elko Series, Northern Side-notched, Hawken Side-notched, Sudden Side-notched and Rocker Base Side-notched points. Excavated sites in the area with Early Archaic components include Deluge Shelter in Dinosaur National Monument, and open campsites along the Green River and on the Diamond Mountain Plateau (Spangler 1995:374). The Middle Archaic (ca. 3000-500 B.C.) is characterized by improved climatic conditions and an increase in human population on the northern Colorado Plateau. Several stratified Middle Archaic sites have been excavated and dozens of sites have been documented in the Uinta Basin. Middle Archaic sites in the area reflect cultural influences from the Plains, although a Great Basin and/or northern Colorado Plateau influence is represented in the continuation of the Elko Series projectile points. Subsistence data from Middle Archaic components indicate gathering and processing of plants as well as faunal exploitation (e.g., mule deer, antelope, bighorn sheep, cottontail rabbit, muskrat, prairie dog, beaver and birds). The Late Archaic period (ca. 500 B.C.-A.D. 550) in the Uinta Basin is distinguished by the continuation of Elko Series projectile points with the addition of semi-subterranean residential structures at base camps. By about A.D. 100, maize horticulture and Rose Springs arrow points had been added to the Archaic lifeway. In the Uinta Basin, the earliest evidence of Late Archaic architecture occurs at the Cockleburr Wash Site (42Un1476) where a temporary structure, probably a brush shelter, yielded a date of 316 B.C. (Tucker 1986). The structure was probably associated with seasonal procurement of wild floral resources gathered along Cliff Creek.

The Formative stage (A.D. 500-1300) is recognized in the area as the Uinta Fremont as first defined by Marwitt (1970). This stage is characterized by a reliance upon domesticated corn and squash, increasing sedentism, and in its later periods, substantial habitation structures, pottery, and bow and arrow weapon technology. Based on the evidence from Caldwell Village, Boundary Village, Deluge Shelter, Mantles Cave and others, the temporal range of the Uinta Fremont appears to be from A.D. 650 to 950. This variant is characterized by shallow, saucer-shaped pithouse structures with randomly placed postholes and off-center firepits, some of which were adobe-rimmed. Traits considered unique or predominate to the Uinta Basin include calcite-tempered pottery, two-handled wide-mouth vessels, Utah type metates, the use of gilsonite for pottery repair, settlement on tops of buttes and large-shouldered bifaces (Shields 1970).

Archaeological evidence suggests that Numic peoples appeared in east-central Utah at approximately A.D. 1100 or shortly before the disappearance of Formative-stage peoples (Reed 1994). The archaeological remains of Numic-speaking Utes consist primarily of lithic scatters with low quantities of brown ware ceramics, rock art, and occasional wickiups. The brown ware ceramics appear to be the most reliable indicator of cultural affiliation, as Desert Side-notched and Cottonwood Triangular points were manufactured by other cultural groups beside the Ute (Horn, Reed, and Chandler 1994:130). The Ute appear to have been hunters and gatherers who exploited various fauna and flora resources. According to macrobotanical and faunal data from dated

components, deer, elk, pronghorn, bison, and small game were acquired (Reed 1994:191). Plant materials thought to have been exploited for food include goosefoot, grass seeds, pinyon nuts, juniper berries, squawbush berries and leaves, hackberry seeds and possibly saltbush seeds, knotweed, chokecherry, and chickweed (Reed 1994:191).

SURVEY METHODOLOGY

An intensive pedestrian survey was performed for this project which is considered 100% coverage. The parcel was examined for cultural resources by the archaeologists walking parallel transects spaced no more than 10 m (30 ft) apart. Ground visibility was considered good. Acreage for the project area totals 480 acres, all of which occurs on land administered by the State of Utah, School and Institutional Trust Land Administration (SITLA).

Cultural resources were recorded as archaeological sites or isolated finds of artifacts. Archaeological sites are defined as spatially definable areas with ten or more artifacts and/or features. Sites were documented by the archaeologists walking transects across the site, spaced no more than 3 m (10 ft) apart and marking the locations of cultural materials with pinflags. This procedure allowed clear definition of site boundaries and artifact concentrations. At the completion of the surface inspection, a Brunton compass was employed to point-provenience diagnostic artifacts and other relevant features in reference to the site datum, a steel rebar stamped with a temporary site number. Archaeological sites were plotted on a 7.5' USGS quadrangle, photographed, and documented with site data entered on an Intermountain Antiquities Computer System (IMACS, 1990 version) inventory form (Appendix A). Isolated finds were defined as individual artifacts or light scatters of items lacking sufficient material culture to warrant IMACS forms or to derive interpretation of human behavior in a cultural and temporal context. All isolated artifacts were plotted on a 7.5' USGS map and are described in this report.

INVENTORY RESULTS

The inventory of Inland Resources' Odekirk Unit resulted in the documentation of 11 prehistoric sites (42Un2947 to 42Un2957) and six isolated finds of artifacts (IF-A through IF-F).

Archaeological Sites

Smithsonian Site No.: 42Un2947
Temporary Site No.: MOAC 177-1
Legal Description: SW/NW/SW of Sec. 32, T 8S, R 18E
NRHP Eligibility: Not Eligible
Description: This is a small lithic procurement locality of unknown cultural affiliation, located on a rocky slope above a wash in a small canyon. The site is surficial and measures 54 m by 26 m. Artifacts consist of lithic debitage and five lithic tools. The

source material is derived from the Uinta Formation and includes gray and white mottled semitranslucent chert, and tan, white, gray, and orange mottled opaque chert. Lithic debitage (n=7) is limited to primary and secondary decortication flakes. Tools consist of three test cores, an unprepared core, a utilized flake, and a hammerstone. No cultural features are visible.

Smithsonian Site No.: 42Un2948
Temporary Site No.: MOAC 177-2
Legal Description: NE/SW/SW of Sec. 32, T 8S, R 18E
NRHP Eligibility: Eligible
Description: This is a lithic procurement locality of unknown cultural affiliation, situated on a low-angled slope near a wash in a small canyon. The site extends 100 m east-west by 26 m north-south. Two concentrations of cultural materials occur along the east edge of the site. Artifacts consist of lithic debitage of various chert, quartzite, and siltstone materials (n=46), and 17 lithic tools. The source material is derived from the Uinta Formation. Debitage is dominated by primary decortication flakes; secondary decortication flakes are common. A small quantity of percussion biface thinning flakes and flake fragments are also present. Tools consist of eight unprepared cores, five test cores, two Stage II bifaces, a Stage I biface, and a single-handed mano. No cultural features are observed.

Smithsonian Site No.: 42Un2949
Temporary Site No.: MOAC 177-3
Legal Description: SE/NE/SW of Sec. 32, T 8S, R 18E
NRHP Eligibility: Not Eligible
Description: This is a small lithic scatter of unknown cultural affiliation, located on rocky, residual sediments on a low-angled slope of a ridge. The site measures 36 m by 40 m and contains debitage (n=19) and a single unprepared core. Debitage is dominated by tan opaque chert decortication flakes, and includes white and yellow quartzite decortication flakes, and flake fragments of all three materials. No cultural features are observed.

Smithsonian Site No.: 42Un2950
Temporary Site No.: MOAC 177-4
Legal Description: SW/SW/NE of Sec. 32, T 8S, R 18E
NRHP Eligibility: Eligible
Description: This is a lithic procurement locality of unknown cultural affiliation, situated on a low-angled slope above a wash near the edge of a canyon. The source material is derived from the Uinta Formation. Artifacts consist of lithic debitage (n=42) and chipped stone tools (n=28). Debitage includes equal numbers of secondary decortication flakes and percussion biface thinning flakes. Primary decortication flakes are common, and a few flake fragments are also present. Tools consist of 27 cores and a Stage II biface. No cultural features are visible.

Smithsonian Site No.: 42Un2951
Temporary Site No.: MOAC 177-5
Legal Description: NW/SW/NE of Sec. 32, T 8S, R 18E
NRHP Eligibility: Not Eligible
Description: This is a small, dispersed lithic procurement locality of unknown cultural affiliation, situated at the edge of a bench mid-way up a ridge. The source material is derived from the Uinta Formation. Artifacts consist of two tan and gray mottled opaque chert primary decortication flakes, and eight cores. The cores are of tan and gray mottled opaque chert, and tan opaque chert, and include four unprepared cores and four test cores. No cultural features are visible.

Smithsonian Site No.: 42Un2952
Temporary Site No.: MOAC 177-6
Legal Description: NW/SW/NE of Sec. 32, T 8S, R 18E
NRHP Eligibility: Not Eligible
Description: This is a small, dispersed lithic procurement locality of unknown cultural affiliation located on a narrow, rocky ridge top. Cultural materials are limited to six primary decortication flakes, two test cores, and three unprepared cores. The source material is derived from the Uinta Formation and includes tan, white, gray, and orange mottled opaque chert. No cultural features are observed.

Smithsonian Site No.: 42Un2953
Temporary Site No.: MOAC 177-7
Legal Description: NW/SE/NE of Sec. 32, T 8S, R 18E
NRHP Eligibility: Not Eligible
Description: This site is a small, low-density lithic procurement locality of unknown cultural affiliation located on a bench mid-way up a ridge. Artifacts include lithic debitage, along with an unprepared core, a test core, and a Stage II biface. Debitage includes primary decortication flakes (n=11), and secondary decortication flakes (n=3), all of tan, gray, white, and orange mottled opaque chert. The source material is derived from the Uinta Formation. No cultural features are visible.

Smithsonian Site No.: 42Un2954
Temporary Site No.: MOAC 177-9
Legal Description: NE/NE/NE of Sec. 32, T 8S, R 18E
NRHP Eligibility: Eligible
Description: This is a lithic procurement locality of unknown cultural affiliation located on a series of low hills divided by small drainages. The site extends 74 m north-south by 34 m east-west. Artifacts consist of debitage (n=25), five unprepared cores, four test cores, and two scrapers. Debitage is primarily dominated by decortication flakes; secondary decortication flakes are also present. Material is primarily tan, white, gray, and orange mottled opaque chert, along with a small quantity of tan chert, white quartzite, and white and yellow quartzite. The source material is derived from the Uinta Formation. No cultural features are visible.

Smithsonian Site No.: 42Un2955
Temporary Site No.: MOAC 177-10
Legal Description: NE/NE/NE of Sec. 32, T 8S, R 18E
NRHP Eligibility: Not Eligible
Description: This is a small lithic procurement locality of unknown cultural affiliation situated on a low-angled, rocky slope below a ridge. Cultural materials consist of lithic debitage (n=14) and four lithic tools. Debitage is dominated by secondary decortication flakes, with primary decortication flakes also present. Lithic tools include three unprepared cores, and one test core. Materials include tan, gray, white, and orange mottled opaque chert, gray opaque chert, and tan opaque chert. The source material is derived from the Uinta formation. No cultural features are visible.

Smithsonian Site No.: 42Un2956
Temporary Site No.: MOAC 177-11
Legal Description: NE/SE/NE of Sec. 32, T 8S, R 18E
NRHP Eligibility: Not Eligible
Description: This is a small lithic procurement locality of unknown cultural affiliation situated on a rocky slope below a ridge. The site measures 59 m north-south by 37 m east-west. Cultural materials consist of lithic debitage (n=18), and three lithic tools. Debitage is dominated by decortication flakes of tan, white, gray, and orange mottled opaque chert, with a lesser quantity of decortication flakes of other chert and quartzite materials. Lithic tools include two unprepared cores and a test core, all of tan, white, gray, and orange mottled opaque chert. The source material is derived from the Uinta Formation. No cultural features are observed.

Smithsonian Site No.: 42Un2957
Temporary Site No.: MOAC 177-8
Legal Description: SE/NE/SE of Sec. 32, T 8S, R 18E
Jurisdiction: State of Utah, SITLA
NRHP Eligibility: Not Eligible
Description: This is a lithic scatter of unknown cultural affiliation located on a low-angled rocky slope. Artifacts consist of lithic debitage and one lithic tool, found mainly in a concentration (Concentration 1). The concentration contains yellow quartzite primary decortication flakes (n=11), and secondary decortication flakes of the same material (n=8). Outside of the concentration is a dark red quartzite unprepared core associated with three primary decortication flakes of the same material. No cultural features are visible.

Isolated Finds of Artifacts

Isolated Find A (IF-A) is located in the NE/SW/SW of Sec. 32, T 8S, R 18E; UTM 591983E/4435758N. It is an aqua-colored glass whiskey bottle.

Isolated Find B (IF-B) is located in the NE/NW/SE of Sec. 32, T 8S, R 18E; UTM 592750E/4436254N. It is a white semitranslucent chert Stage III biface that exhibits slight edge-wear, and a retouched tip (5.3x2.7x1cm).

Isolated Find C (IF-C) is located in the NW/SE/SE of Sec. 32, T 8S, R 18E; UTM 592885E/4435839N. It consists of a tan opaque chert test core with one flake detached from a narrow margin (7.6x6.8x2.2cm), a white opaque chert secondary decortication flake, and a tan, white, gray, and orange mottled opaque chert primary decortication flake.

Isolated Find D (IF-D) is located in the SE/SE/NE of Sec. 32, T 8S, R 18E; UTM 593002E/4436433N. It includes a white semitranslucent chert hammerstone with battering on two poles and along one margin (6.5x5x5cm), and a tan opaque chert secondary decortication flake.

Isolated Find E (IF-E) is located in the SW/SE/NE of Sec. 32, T 8S, R 18E; UTM 592920E/4436408N. It includes a tan, white, gray, and orange mottled opaque chert core with 9+ flakes removed from narrow margins (6.5x4.3x2cm), three tan, white, gray, and orange mottled opaque chert primary decortication flakes, a pink quartzite secondary decortication flake, and a white semitranslucent chert primary decortication flake.

Isolated Find F (IF-F) is located in the NE/SW/NE of Sec. 32, T 8S, R 18E; UTM 592614E/4436603N. It consists of a tan opaque chert unprepared core with 7 flakes removed from narrow margins (6.2x4x2.8cm), a tan opaque chert cobble test core with 5 flakes detached from wide margins (10x6x3.4cm), two tan opaque chert secondary decortication flakes, and a tan opaque chert primary decortication flake.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

The National Register Criteria for Evaluation of Significance and procedures for nominating cultural resources to the National Register of Historic Places (NRHP) are outlined in 36 CFR 60.4 as follows:

> The quality of significance in American history, architecture, archaeology-logy, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, material, workmanship, feeling, and association, and that they:
>
> a)...are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b)...are associated with the lives of persons significant to our past; or
>
> c)...embody the distinctive characteristics of a type, period, or method of construction; or that represents the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d)...have yielded or may be likely to yield information important in prehistory or history.

The inventory of Inland Resources' Odekirk Unit resulted in the documentation of 11 prehistoric sites (42Un2947 to 42Un2957), all of unknown temporal affiliation. The majority of these sites (n=9) are lithic procurement localities at which raw materials from the Uinta Formation were exploited. Two of the sites are classified as lithic scatters containing a low number of debitage and chipped stone tools. Three of the lithic procurement sites (42Un2948, 42Un2950 and 42Un2954) are recommended eligible to the NRHP under criterion D. These sites, although surficial, exhibit a variety of tools (cores, bifaces, hammerstones, and a mano) as well as spatial pattering of artifacts. Additional investigations at these sites is likely to contribute to the prehistoric research domains of the area.

Eight of the prehistoric sites (42Un2947, 42Un2949, 42Un2951, 42Un2952, 42Un2953, 42Un2955, 42Un2956, and 42Un2957) are evaluated as not eligible for inclusion to the NRHP. They are limited activity sites lacking temporal indicators, spatial patterning and features, and hence fail to possess additional information relevant to the prehistoric research domains of the area.

MANAGEMENT RECOMMENDATIONS

The inventory of Inland Resources' Odekirk Unit resulted in the documentation of three prehistoric sites (42Un2948, 42Un2950 and 42Un2954) that are considered eligible to the NRHP. It is recommended that these sites be avoided by the undertaking. Based on the adherence to this recommendation, a determination of "no historic properties affected" pursuant to Section 106, CFR 800 is proposed for this project.

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002

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 01/17/2002

API NO. ASSIGNED: 43-047-34465

WELL NAME: SUNDANCE 15-32-8-18

OPERATOR: INLAND PRODUCTION (N5160)

CONTACT: MANDIE CROZIER

PHONE NUMBER: 435-646-3721

PROPOSED LOCATION:

SWSE 32 080S 180E

SURFACE: 0552 FSL 2191 FEL

BOTTOM: 0552 FSL 2191 FEL

UINTAH

8 MILE FLAT NORTH (590)

LEASE TYPE: 3 - State

LEASE NUMBER: ML-22058

SURFACE OWNER: 3 - State

PROPOSED FORMATION: GRRV

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	3/13/02
Geology		
Surface		

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[] Ind[] Sta[3] Fee[]
(No. 4471291)

N Potash (Y/N)

N Oil Shale 190-5 (B) or 190-3 or 190-13

✓ Water Permit
(No. MUNICIPAL)

N RDCC Review (Y/N)
(Date:)

N/A Fee Surf Agreement (Y/N)

LOCATION AND SITING:

___ R649-2-3. Unit

___ R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

✓ R649-3-3. Exception

___ Drilling Unit
Board Cause No:
Eff Date:
Siting:

___ R649-3-11. Directional Drill

COMMENTS: Need presite (02-06-02)

STIPULATIONS: 1-Statement of basis
2- Spacing Slip.

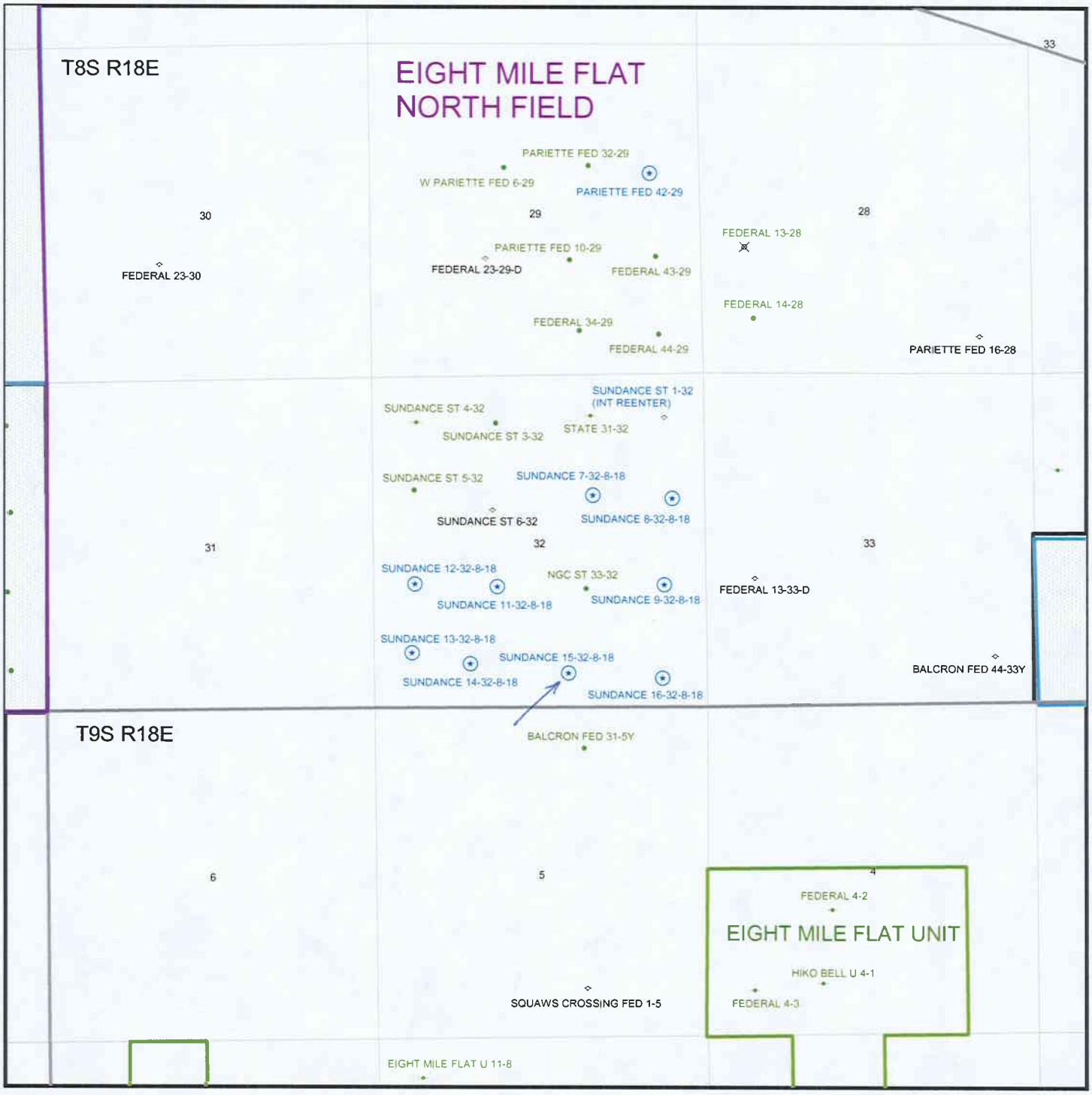
Utah Oil Gas and Mining

OPERATOR: INLAND PROD CO (N5160)

SEC. 32, T8S, R18E

FIELD: EIGHT MILE FLAT NORTH (590)

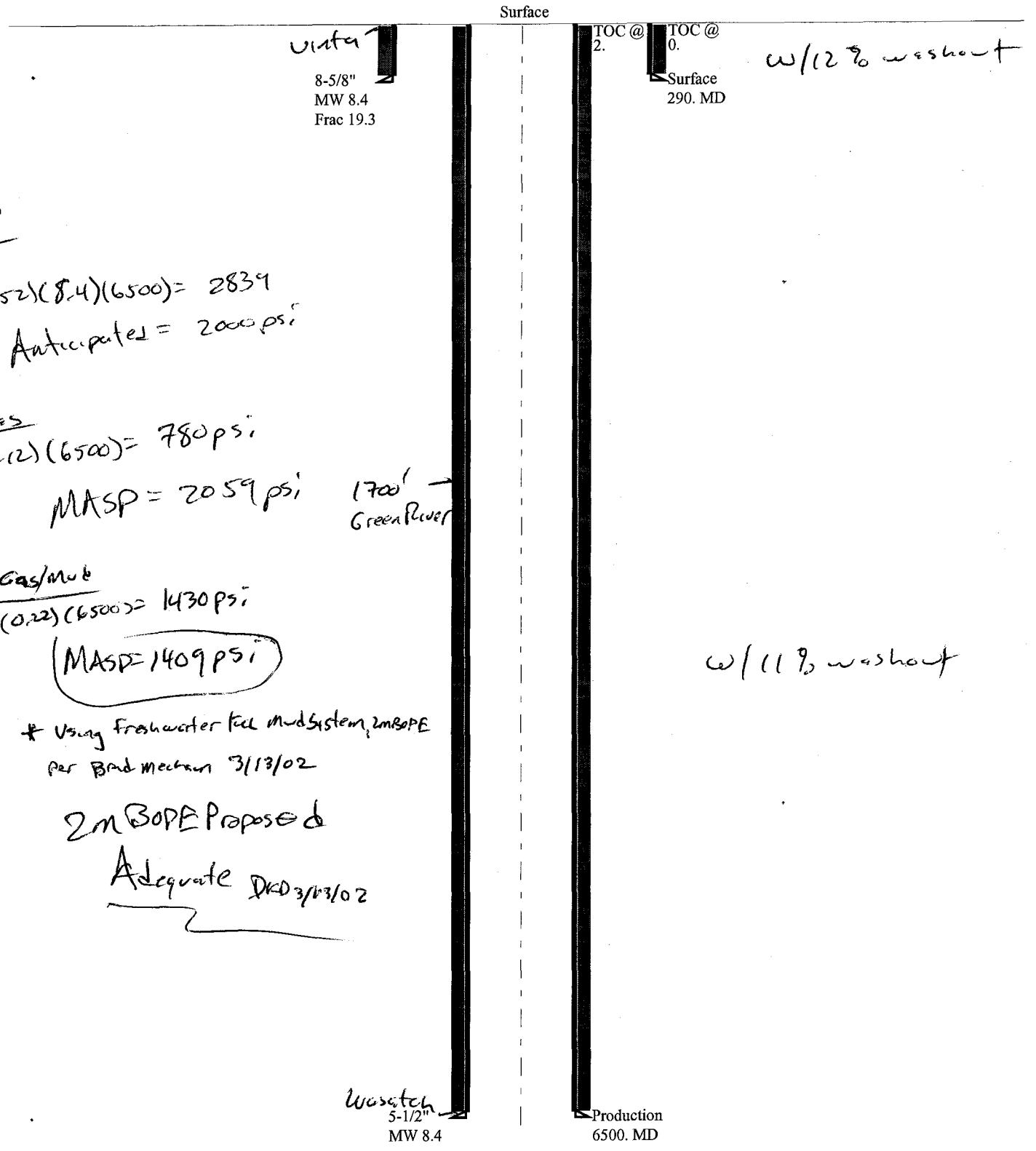
COUNTY: UINTAH SPACING: R649-3-3/EX LOC



PREPARED BY: LCORDOVA
DATE: 1-FEBRUARY-2002

02-02 Inland Sundance 15-3[illegible]8-18

Casing Schematic



BOP

BHP

$(0.052)(8.4)(6500) = 2839$

Anticipated = 2000 psi

Gas

$(0.12)(6500) = 780$ psi

MASP = 2059 psi

Gas/Mud

$(0.22)(6500) = 1430$ psi

MASP = 1409 psi

* Using freshwater fill mud system, 2m BOPE per Brad Mecham 3/13/02

2m BOPE Proposed

Adequate DKD 3/13/02

DIVISION OF OIL, GAS AND MINING
APPLICATION FOR PERMIT TO DRILL
STATEMENT OF BASIS

Operator Name: INLAND PRODUCTION COMPANY
Well Name & Number: SUNDANCE 15-32-8-18
API Number: 43-047-34465
Location: 1/4,1/4 SW/SE **Sec.** 32 **T.** 8S **R.** 18E

Geology/Ground Water:

Inland has proposed setting 290' of surface casing at this location. The depth to the base of the moderately saline ground water is estimated to be at around 500'. A search of Division of Water Rights records indicates that no water wells are located within a 10,000 foot radius of the center of Section 32 . The surface formation at this location is the Uinta Formation. The Uinta Formation is made up of interbedded sandstones and shales. The Sandstones are of a discontinuous nature and probably don't represent a significant aquifer. The existing casing should adequately protect any useable ground water.

Reviewer: Brad Hill
Date: 02/11/2002
Surface:

The pre-drill investigation of the surface was performed on 2/06/2002. Surface owner and mineral owner is State of Utah. SITLA and DWR were notified of this investigation on 1/31/2002. Miles Hanberg representing the DWR was present. This site appears to be the best site for a location in the immediate area. Castle Peak Draw is 0.25 miles south of site.

Reviewer: David W. Hackford
Date: 2/7/2002

Conditions of Approval/Application for Permit to Drill:

1. A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.

ON-SITE PREDRILL EVALUATION
Division of Oil, Gas and Mining

OPERATOR: INLAND PRODUCTION COMPANY
WELL NAME & NUMBER: SUNDANCE 15-32-8-18
API NUMBER: 43-047-34465
LEASE: ML-22058 **FIELD/UNIT:** MONUMENT BUTTE
LOCATION: 1/4,1/4 SW/SE **SEC:** 32 **TWP:** 8S **RNG:** 18E
2191' **F** E **L** 552' **F** S **L**
LEGAL WELL SITING: **Statewide 400 foot window in center of 40 acre tract and no closer than 920 feet from another well.**
GPS COORD (UTM): 12592524E 4435737N
SURFACE OWNER: STATE OF UTAH

PARTICIPANTS:
BRAD MECHAM, (INLAND): MILES HANBERG, (DWR): DAVID HACKFORD, (DOGM).

REGIONAL/LOCAL SETTING & TOPOGRAPHY:
SITE IS 21.7 MILES SOUTHEAST OF MYTON, UTAH. THE SITE IS ON THE POINT OF A RIDGE RUNNING NORTHWEST TO SOUTHEAST. THIS RIDGE HAS NUMEROUS SANDSTONE OUTCROPPINGS. DRAINAGE IS TO THE EAST, SOUTH AND WEST.

SURFACE USE PLAN:

CURRENT SURFACE USE: WILDLIFE AND LIVESTOCK GRAZING. HUNTING.

PROPOSED SURFACE DISTURBANCE: LOCATION WOULD BE 205' BY 212' AND ACCESS ROAD WOULD BE 1440 FEET.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: SEE ATTACHED MAP FROM GIS DATABASE

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: ALL PRODUCTION FACILITIES WILL BE ON LOCATION AND ADDED AFTER DRILLING WELL. ANY PIPELINES NECESSARY FOR THIS WELL WILL FOLLOW ACCESS ROAD.

SOURCE OF CONSTRUCTION MATERIAL: ALL CONSTRUCTION MATERIAL WILL BE BORROWED FROM SITE DURING CONSTRUCTION OF LOCATION.

ANCILLARY FACILITIES: NONE WILL BE REQUIRED.

WASTE MANAGEMENT PLAN:

DRILLED CUTTINGS WILL BE SETTLED INTO RESERVE PIT. LIQUIDS FROM PIT WILL BE ALLOWED TO EVAPORATE. FORMATION WATER WILL BE CONFINED TO STORAGE TANKS. SEWAGE FACILITIES, STORAGE AND DISPOSAL WILL BE HANDLED BY COMMERCIAL CONTRACTOR. TRASH WILL BE CONTAINED IN TRASH BASKETS AND HAULED TO AN APPROVED LAND FILL.

ENVIRONMENTAL PARAMETERS:

AFFECTED FLOODPLAINS AND/OR WETLANDS: NONE

FLORA/FAUNA: NATIVE GRASSES, SHADSCALE, GREASEWOOD, PRICKLEY PEAR: RODENTS, COYOTES, SONGBIRDS, RAPTORS, PRONGHORN.

SOIL TYPE AND CHARACTERISTICS: LIGHT BROWN SANDY CLAY, WITH LIGHT RED SHALE ROCKS.

EROSION/SEDIMENTATION/STABILITY: VERY LITTLE NATURAL EROSION. SEDIMENTATION AND STABILITY ARE NOT A PROBLEM AND LOCATION CONSTRUCTION SHOULDN'T CAUSE ANY INCREASE IN STABILITY OR EROSION PROBLEMS.

PALEONTOLOGICAL POTENTIAL: NONE OBSERVED.

RESERVE PIT:

CHARACTERISTICS: 80' BY 40' AND EIGHT FEET DEEP.

LINER REQUIREMENTS (Site Ranking Form attached):
A 12 MIL LINER WILL BE REQUIRED IN THE RESERVE PIT.

SURFACE RESTORATION/RECLAMATION PLAN:

AS PER S.I.T.L.A.

SURFACE AGREEMENT: AS PER S.I.T.L.A.

CULTURAL RESOURCES/ARCHAEOLOGY: SITE WAS INSPECTED BY MONTGOMERY ARCHAEOLOGICAL CONSULTANTS. A REPORT OF THIS INVESTIGATION WILL BE PLACED ON FILE.

OTHER OBSERVATIONS/COMMENTS:

THE PRE-DRILL INVESTIGATION TOOK PLACE ON A COLD, CLEAR DAY. THE GROUND WAS PARTIALLY COVERED WITH SNOW.

ATTACHMENTS:

PHOTOS OF SITE WILL BE PLACED ON FILE.

DAVID W. HACKFORD	2/06/02-11:00AM
DOGM REPRESENTATIVE	**DATE/TIME**

Evaluation Ranking Criteria and Ranking Score
For Reserve and On-site Pit Liner Requirements

Site-Specific Factors	Ranking	Site Ranking
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	5
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	0
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	15	0
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	0
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	20
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	15	
TDS >10000 or Oil Base	20	
Mud Fluid containing high levels of hazardous constituents		5
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	0
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	0
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	0
Presence of Nearby Utility Conduits		
Not Present	0	
Unknown	10	
Present	15	0
Final Score		30


2002 2 7


2002 2 7

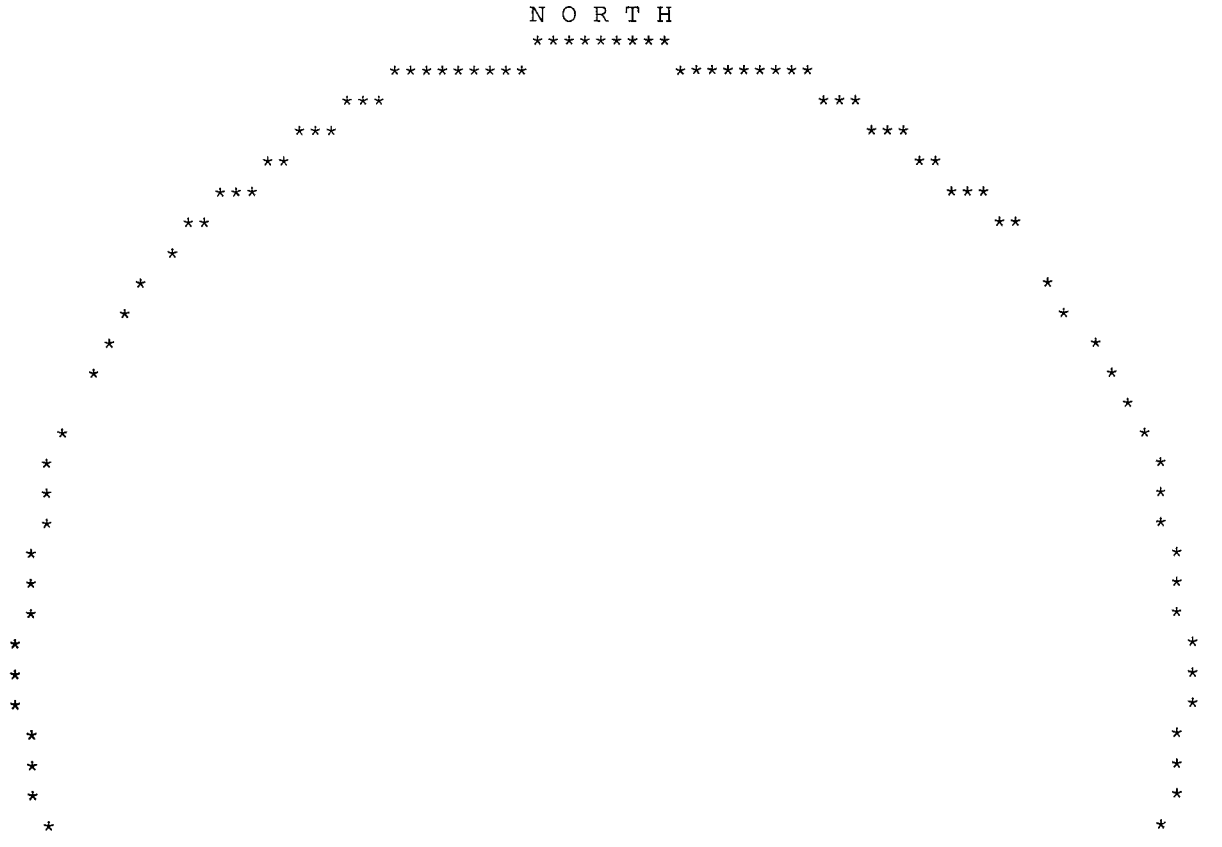

2002 2 7

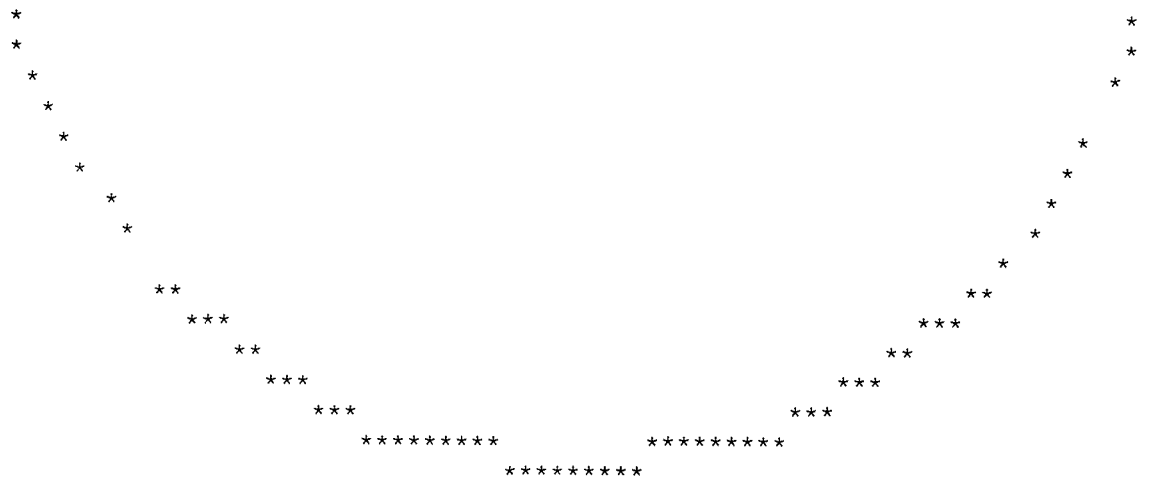

2002 2 7

UTAH DIVISION OF WATER RIGHTS
WATER RIGHT POINT OF DIVERSION PLOT CREATED MON, FEB 11, 2002, 10:55 AM
PLOT SHOWS LOCATION OF 0 POINTS OF DIVERSION

PLOT OF AN AREA WITH A RADIUS OF 10000 FEET FROM A POINT
FEET, FEET OF THE CT CORNER,
SECTION 32 TOWNSHIP 8S RANGE 18E SL BASE AND MERIDIAN

PLOT SCALE IS APPROXIMATELY 1 INCH = 4000 FEET





Inland
PRODUCTION COMPANY
A Subsidiary of Inland Resources Inc.

January 30, 2002

State of Utah
Division of Oil, Gas & Mining
Attn: Brad Hill
1594 West North Temple - Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Topographic Map C for Section 32 APD's.

Dear Brad:

Enclosed find a Topographic Map C for all of the section 32 APD's that have been previously submitted. If you have any questions, feel free to give either Brad or myself a call.

Sincerely,

Mandie Crozier

Mandie Crozier
Permit Clerk

mc
enclosures

RECEIVED
FEB 0 1 2002
DIVISION OF
OIL, GAS AND MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML-22058	6. SURFACE: State
7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
8. UNIT or CA AGREEMENT NAME: N/A	
9. WELL NAME and NUMBER: Sundance 15-32-8-18	
10. FIELD AND POOL, OR WILDCAT: Monument Butte	
11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 32 T8S 18E	
12. COUNTY: Uintah	13. STATE: UTAH

1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐

B. TYPE OF WELL: OIL ☑ GAS ☐ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: Inland Production Company

3. ADDRESS OF OPERATOR: Route #3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER: (435) 646-3721

4. LOCATION OF WELL (FOOTAGES)

AT SURFACE: SW/SE 552' FSL 2191' FEL

AT PROPOSED PRODUCING ZONE:

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: Approximately 21.7 miles southeast of Myton, UT

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET)	16. NUMBER OF ACRES IN LEASE:	17. NUMBER OF ACRES ASSIGNED TO THIS WELL:
Approximately 552' f/lse line	640 acres	40
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)	**19. PROPOSED DEPTH:**	**20. BOND DESCRIPTION:**
Approximately 1685'	6,500	Hartford Accident #4471291
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):	**22. APPROXIMATE DATE WORK WILL START:**	**23. ESTIMATED DURATION:**
4908.5 GR	4/1/2002	7 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
12 1/4	8 5/8	J-55	24#	290	Class G Cement	155sx +/-10% 1.17 Cu Ft/sk	15.8 PPG
7 7/8	5 1/2	J-55	15.5#	6,500	Premium Lite II	275sx lead 3.43 Cu Ft/sk	11.0 PPG
					Class G Cement	450sx tail 1.59 Cu Ft/sk	14.2 PPG

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER

☐ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER

☑ COMPLETE DRILLING PLAN

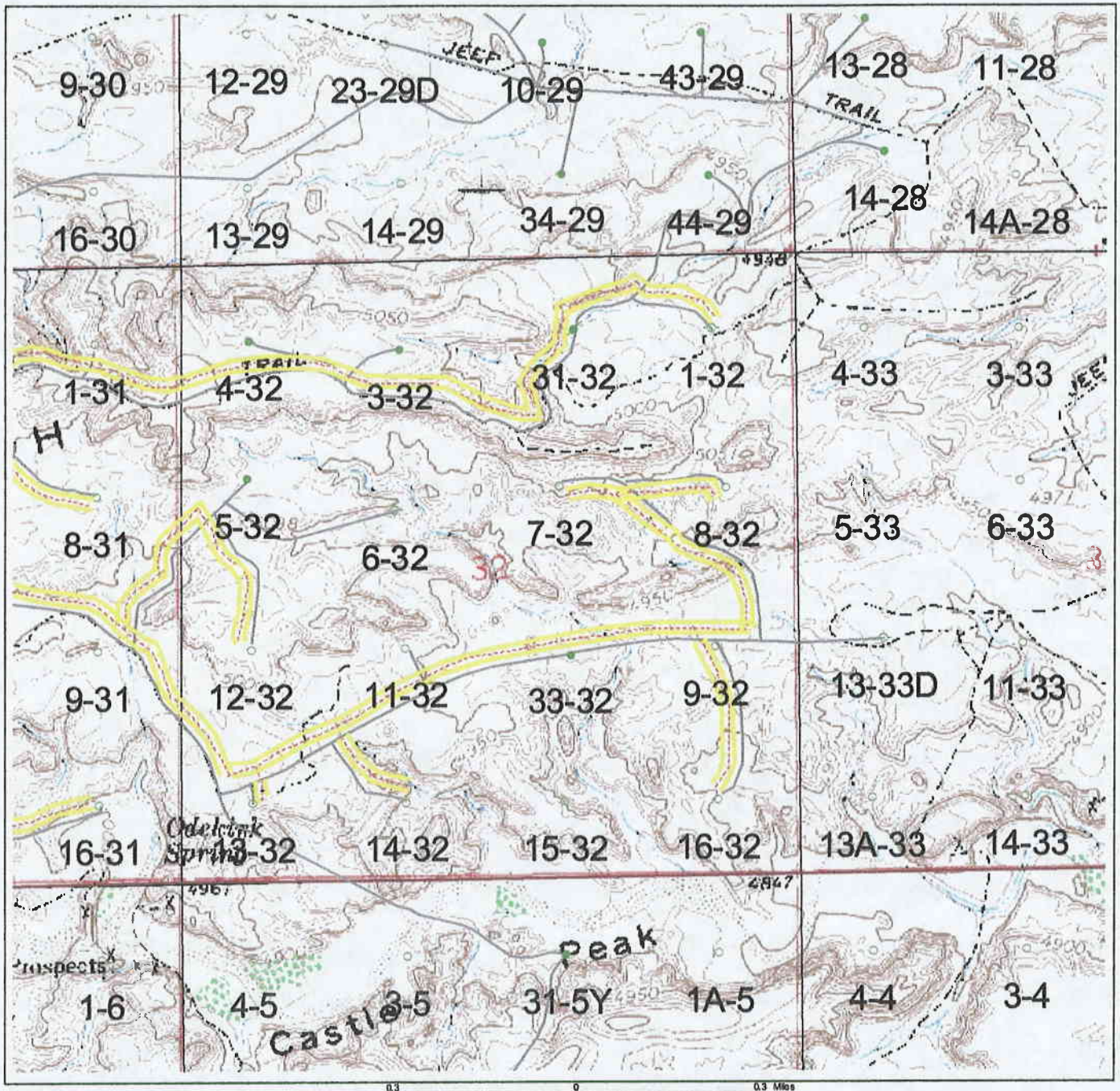
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Mandie Crozier TITLE Permit Clerk

SIGNATURE Mandie Crozier DATE 1/15/02

(This space for State use only)

API NUMBER ASSIGNED: _____ APPROVAL:



Gas Line ROW

Pending Approval

ROW Approved

Compressor Stations

Gas Pipelines

- 10"
- 6" Source Line
- 6" Proposed
- 4" Source Line
- 4" Proposed
- Gas Buried
- Petroglyph Gas Line
- Questar Gas Line
- Compressors - Other
- Fuel Gas Meters

Roads (Digitized)

- Paved
- Dirt
- Proposed
- Two Track
- Private

N

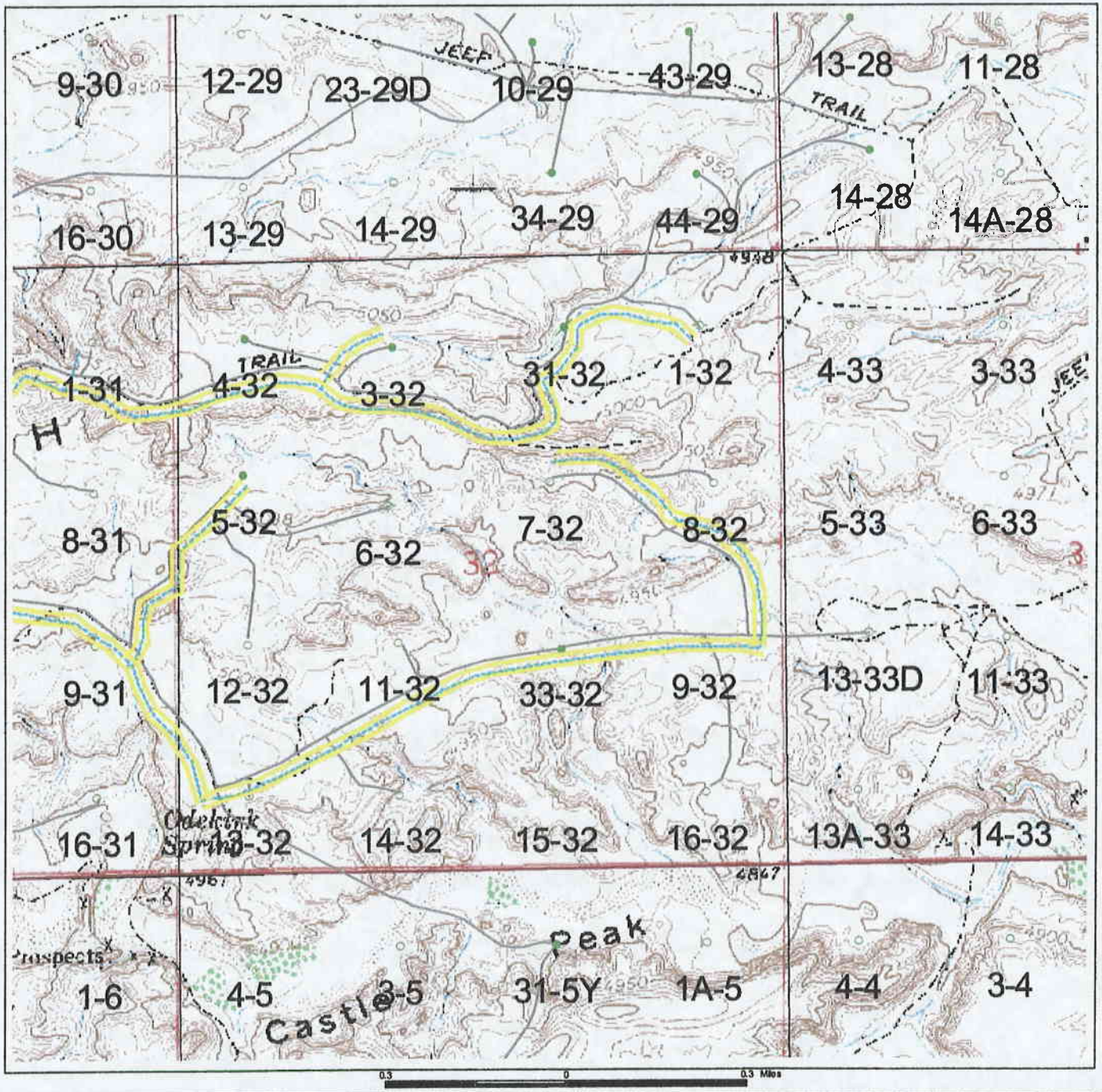
Topographic Map C
T8S-R18E-32

Gas Pipeline Map

UINTA BASIN, UTAH

Duchesne & Uintah Counties, Utah

January 24, 2002



Water Taps

2001 Injection Conversion Program

Waterline ROW

Pending Approval

ROW Approved

Water Injection Permits

Pending Approval

Permit Approved

Water Source 6 Inch
Water Source 4 Inch
Water 4 Inch - High Pressure
Water 4 Inch Poly
Water High Pressure 2 to 3 Inch
Proposed High Pressure Water
Injection Stations
Pump Stations

Roads (Digitized)

Paved
Dirt
Proposed
Two Track
Private

N

Topographic Map C
T8S-R18E-32

410 17th Street, Suite 700
Denver, Colorado 80202
Phone: (303) 893-0102

Water Pipeline Map

UINTA BASIN, UTAH

Duchesne & Uintah Counties, Utah

January 24, 2002

PRODUCTION COMPANY
A Subsidiary of Inland Resources Inc.

February 11, 2002

Ms. Lisha Cordova
State of Utah
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

RE: Exceptional Spacing for the Proposed 15-32-8-18 Well

Dear Lisha:

Please find attached a copy of the well location survey plats for the above-referenced well. Inland Production Company (Inland) requests administrative approval for a location exception to Rule R649-3-2, which governs the location of wells in the State of Utah.

Due to topographic constraints on access and siting of the proposed well, it is necessary to move the location of the well in a southwesterly direction. This moves the well closer to the exterior of the ML-22058 lease. However, there are no lease interest owners within a 460-foot radius of the new proposed location.

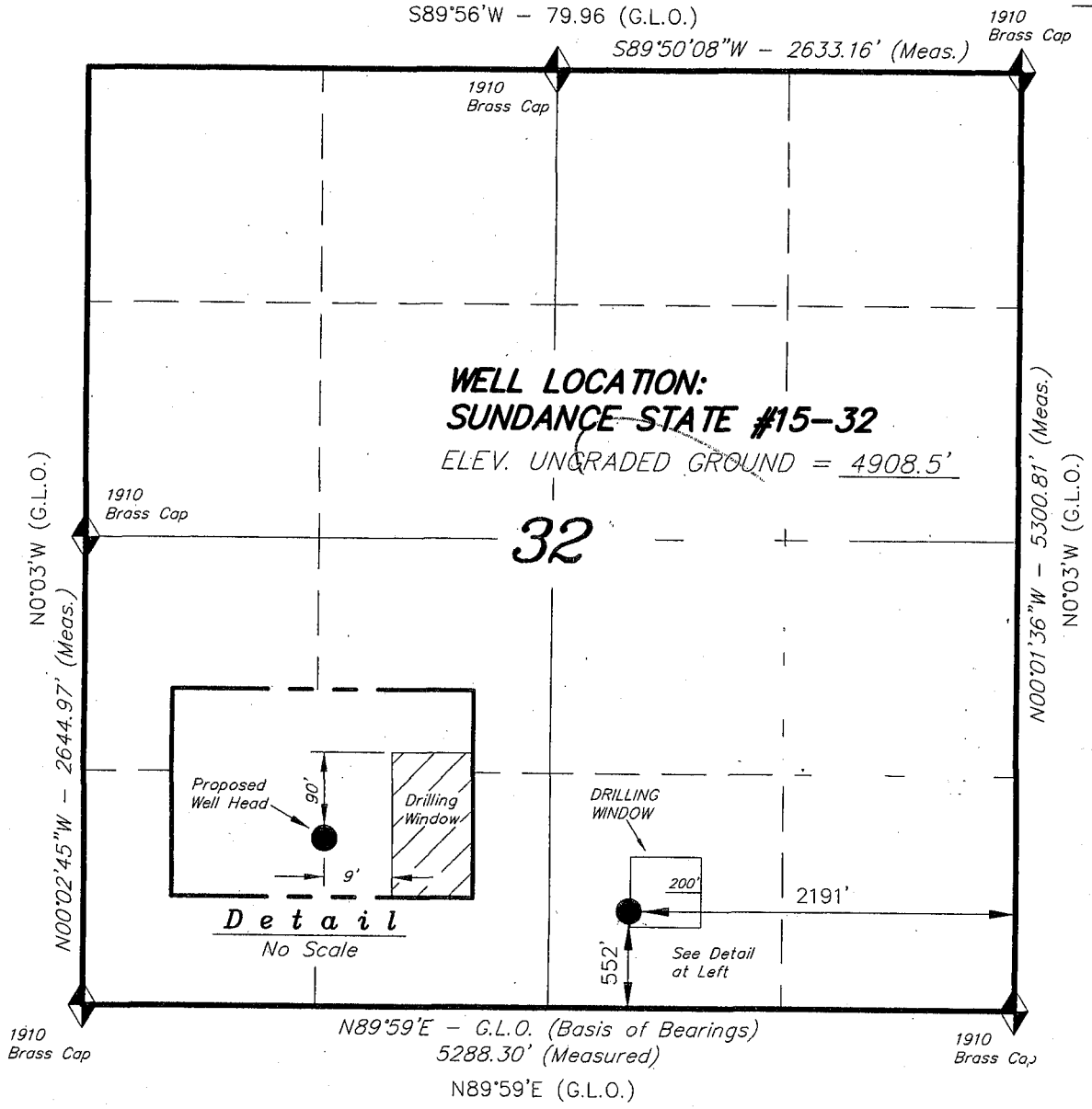
Please contact me if you need additional information regarding this well.

Respectfully,

Mandie Crozier
Permit Clerk

Enclosures

T8S, R18E, S.L.B.&M.



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

INLAND PRODUCTION COMPANY

WELL LOCATION, SUNDANCE STATE #15-32, LOCATED AS SHOWN IN THE SW 1/4 SE 1/4 OF SECTION 32, T8S, R18E, S.L.B.&M. UINTAH COUNTY, UTAH.

N

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR No. 189377 STACY W. STEWART STATE OF UTAH

REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

TRI STATE LAND SURVEYING & CONSULTING
38 WEST 100 NORTH – VERNAL, UTAH 84078
(435) 781-2501

SCALE: 1" = 1000'	SURVEYED BY: D.J.S.
DATE: 12-18-01	DRAWN BY: J.R.S.
NOTES:	FILE #

Well name:	**02-02 Inland Sundance 15-32-8-18**
Operator:	**Inland Production Company**
String type:	Surface
Project ID:	43-047-34465
Location:	Uintah County

Design parameters:

Collapse

Mud weight: 8.400 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 0 psi

Internal gradient: 0.436 psi/ft

Calculated BHP 127 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight.

Neutral point: 253 ft

Environment:

H2S considered? No

Surface temperature: 65 °F

Bottom hole temperature: 69 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 290 ft

Cement top: Surface

Non-directional string.

Re subsequent strings:

Next setting depth: 6,500 ft

Next mud weight: 8.400 ppg

Next setting BHP: 2,836 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 290 ft

Injection pressure 290 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	290	8.625	24.00	J-55	ST&C	290	290	7.972	14

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	127	1370	10.83	127	2950	23.31	6	244	40.12 J

Prepared by: Dustin K. Doucet
Utah Dept. of Natural Resources
Phone: 801-538-5281
FAX: 801-359-3940

Date: February 14,2002
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 290 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.

Burst strength is not adjusted for tension.

Well name:	**02-02 Inland Sundance 15-32-8-18**
Operator:	**Inland Production Company**
String type:	Production
Project ID:	43-047-34465
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 0 psi
Internal gradient: 0.436 psi/ft
Calculated BHP 2,836 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 5,674 ft

Environment:
H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 156 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 300 ft

Cement top: 2 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	6500	5.5	15.50	J-55	ST&C	6500	6500	4.825	203.8

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	2836	4040	1.42	2836	4810	1.70	101	202	2.00 J

Prepared by: Dustin K. Doucet, Utah Dept. of Natural Resources
Phone: 801-538-5281
FAX: 801-359-3940
Date: February 14,2002
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 6500 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.
Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

003

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

March 14, 2002

Inland Production Company
Route 3 Box 3630
Myton UT 84052

Re: Sundance 15-32-8-18 Well, 552' FSL, 2191' FEL, SW SE, Sec. 32, T. 8 South, R. 18 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-34465.

Sincerely,

John R. Baza
Associate Director

er
Enclosures
cc: Uintah County Assessor
SITLA

Operator: Inland Production Company

Well Name & Number Sundance 15-32-8-18

API Number: 43-047-34465

Lease: ML 22058

Location: SW SE **Sec.** 32 **T.** 8 South **R.** 18 East

Conditions of Approval

1. **General**
Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. **Notification Requirements**
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:
   - 24 hours prior to cementing or testing casing
   - 24 hours prior to testing blowout prevention equipment
   - 24 hours prior to spudding the well
   - within 24 hours of any emergency changes made to the approved drilling program
   - prior to commencing operations to plug and abandon the well

   The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):
   - Dan Jarvis at (801) 538-5338
   - Carol Daniels at (801) 538-5284 (spud)

3. **Reporting Requirements**
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

004

FORM 9

STATE OF UTAH

DIVISION OF OIL, GAS, AND MINING

1. **SUNDRY NOTICES AND REPORTS ON WELLS**	5. LEASE DESIGNATION AND SERIAL NO. **ML-22058**
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use "APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBAL NAME **N/A**
OIL WELL [ ] GAS WELL [ ] OTHER [X]	7. UNIT AGREEMENT NAME **NA**
2. NAME OF OPERATOR **INLAND PRODUCTION COMPANY**	8. WELL NAME and NUMBER **SUNDANCE 15-32-8-18**
3. ADDRESS AND TELEPHONE NUMBER **Rt. 3 Box 3630, Myton Utah 84052 435-646-3721**	9 API NUMBER **43-047-34465**
4. LOCATION OF WELL Footages **552 FSL 2191 FEL** QQ, SEC, T, R, M: **SW/SE Section 32, T8S R18E**	10 FIELD AND POOL, OR WILDCAT **8 MILE FLAT NORTH** COUNTY **UINTAH** STATE **UTAH**

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

NOTICE OF INTENT: (Submit in Duplicate)		SUBSEQUENT REPORT OF: (Submit Original Form Only)	
[ ] ABANDON	[ ] NEW CONSTRUCTION	[ ] ABANDON*	[ ] NEW CONSTRUCTION
[ ] REPAIR CASING	[ ] PULL OR ALTER CASING	[ ] REPAIR CASING	[ ] PULL OR ALTER CASING
[ ] CHANGE OF PLANS	[ ] RECOMPLETE	[ ] CHANGE OF PLANS	[ ] RECOMPLETE
[ ] CONVERT TO INJECTION	[ ] REPERFORATE	[ ] CONVERT TO INJECTION	[ ] REPERFORATE
[ ] FRACTURE TREAT OR ACIDIZE	[ ] VENT OR FLARE	[ ] FRACTURE TREAT OR ACIDIZE	[ ] VENT OR FLARE
[ ] MULTIPLE COMPLETION	[ ] WATER SHUT OFF	[X] OTHER **Permit Extension**	
[X] OTHER Notice of Intent		DATE WORK COMPLETED	
		Report results of Multiple Completion and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.	
		*Must be accompanies by a cement verification report.	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.

Inland Production Company requsts to extend the Permit to Drill this well for one year.

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DIV. OF OIL, GAS & MINING

13.
NAME & SIGNATURE : Mandie Crozier TITLE Permit Clerk DATE 3/5/2003

(This space for State use only)

4/94 * See Instructions On Reverse Side

Approved by the
Utah Division of
Oil, Gas and Mining
Date: 03-06-03
By:

COPY SENT TO OPERATOR
Date: 03-07-03
Initials: CHD

005

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: **INLAND PRODUCTION COMPANY**

Well Name: **SUNDANCE 15-32-8-18**

Api No: **43-047-34465** Lease Type: **STATE**

Section **32** Township **08S** Range **18E** County **UINTAH**

Drilling Contractor **LEON ROSS** RIG # **15**

SPUDDED:

Date **12/02/03**

Time **8:00 AM**

How **DRY**

Drilling will commence:

Reported by **PAT WISENER**

Telephone # **1-435-823-7468**

Date **12/02/2003** Signed **CHD**

DOGM Form 5
May 5, 1987

006

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. LEASE DESIGNATION AND SERIAL NO.
ML-22058

1. **SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT--" for such proposals.)

6. IF INDIAN, ALLOTTEE OR TRIBAL NAME
N/A

OIL WELL [X] GAS WELL [ ] OTHER [ ]

7. UNIT AGREEMENT NAME
N/A

2. NAME OF OPERATOR
INLAND PRODUCTION COMPANY

8. FARM OR LEASE NAME
SUNDANCE 15-32-8-18

3. ADDRESS OF OPERATOR
Rt. 3 Box 3630, Myton Utah 84052
435-646-3721

9. WELL NO.
SUNDANCE 15-32-8-18

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
SW/SE Section 32, T8S R18E
552 FSL 2191 FEL

10. FIELD AND POOL, OR WILDCAT
8 MILE FLAT NORTH

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SW/SE Section 32, T8S R18E

14 API NUMBER	15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY OR PARISH	13. STATE
43-047-34465	**4909 GR**	**UINTAH**	**UT**

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF [ ]	PULL OR ALTER CASING [ ]	WATER SHUT-OFF [ ]	REPAIRING WELL [ ]
FRACTURE TREAT [ ]	MULTIPLE COMPLETE [ ]	FRACTURE TREATMENT [ ]	ALTERING CASING [ ]
SHOOT OR ACIDIZE [ ]	ABANDON* [ ]	SHOOTING OR ACIDIZING [ ]	ABANDONMENT* [ ]
REPAIR WELL [ ]	[ ]	(OTHER) [x] **Spud Notice**	
(OTHER)	[ ]	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17 DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

On 12-02-03 MIRU Ross # 21. Spud well @ 8:00 am. Drill 307' of 12 1/4" hole with air mist. TIH w/ 7 Jt's 85/8" J-55 24# csgn. Set @ 311.14'/KB. On 12-04-03. Cement with 150 sks of Class "G" w/ 2% CaCL2 + 1/4# sk Cello-Flake Mixed @ 15.8 ppg > 1.17 cf/sk yeild. 4 bbls cement returned to surface. WOC.

18 I hereby certify that the foregoing is true and correct

SIGNED Floyd Mitchell TITLE Drilling Foreman DATE 12/4/2003

cc: BLM

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

* See Instructions On Reverse Side

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DIV. OF OIL, GAS & MINING

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RECEIVED

DEC 0 5 2003

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
ENTITY ACTION FORM -FORM 6

OPERATOR: INLAND PRODUCTION COMPANY
ADDRESS: RT. 3 BOX 3630
MYTON, UT 84052

OPERATOR ACCT. NO. N5160

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
A	99999	13978	43-047-34465	Sundance State 15-32-8-18	SW/SE	32	8S	18E	Uintah	December 2, 2003	12/11/03

WELL 1 COMMENTS: GRRV K

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE

WELL 2 COMMENTS:

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE

WELL 3 COMMENTS:

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE

WELL 4 COMMENTS:

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE

WELL 5 COMMENTS:

ACTION CODES (See instructions on back of form)
- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE Use COMMENT section to explain why each Action Code was selected

(3/89)

Kebbie S. Jones
Signature

Production Clerk
Title

December 5, 2003
Date

PAGE 02 INLAND 4356463031 12/05/2003 15:56

INLAND PRODUCTION COMPANY - CASING & CEMENT REPORT

007

5 1/2" CASING SET AT 5990.96

Flt cllr @ 5977'

LAST CASING 8 5/8" SET AT 311'/KB

OPERATOR Inland Production Company

DATUM 12' KB

WELL Sundance 15-32-8-18

DATUM TO CUT OFF CASING 12'

FIELD/PROSPECT Monument Butte

DATUM TO BRADENHEAD FLANGE

CONTRACTOR & RIG # Eagle # 1

TD DRILLER 6009' LOGGI 6009'

HOLE SIZE 7 7/8"

T08S R18E S-32
43-047-34465

LOG OF CASING STRING:

PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Landing Jt					14
		8' @ 4212					
135	5 1/2"	ETC LT & C casing	15.5#	J-55	8rd	A	5965.21
		Float collar					0.6
1	5 1/2"	ETC LT&C csg	15.5#	J-55	8rd	A	12.5
		GUIDE shoe			8rd	A	0.65

CASING INVENTORY BAL.	FEET	JTS
TOTAL LENGTH OF STRING	5992.96	136
LESS NON CSG. ITEMS	15.25	
PLUS FULL JTS. LEFT OUT	125.63	3
TOTAL	6103.34	139
TOTAL CSG. DEL. (W/O THRDS)	6103.34	139
TIMING	1ST STAGE	2nd STAGE
BEGIN RUN CSG.	2:00AM	12/18/2003
CSG. IN HOLE	6:00Am	12/18/2003
BEGIN CIRC	6:00Am	12/18/2003
BEGIN PUMP CMT	7:30AM	12/18/2003
BEGIN DSPL. CMT	8:20AM	12/18/2003
PLUG DOWN	12/18/2003	@8:50AM

TOTAL LENGTH OF STRING	5992.96
LESS CUT OFF PIECE	14
PLUS DATUM TO T/CUT OFF CSG	12
CASING SET DEPTH	5990.96

} COMPARE

GOOD CIRC THRU JOB YES

Bbls CMT CIRC TO SURFACE 30 bbls cement to pit

RECIPROCATED PIPE I N/A THRUSTROKE

DID BACK PRES. VALVE HOLD ? YES

BUMPED PLUG TO 1810 PSI

CEMENT USED — CEMENT COMPANY- B. J.

STAGE	# SX	CEMENT TYPE & ADDITIVES
1	300	Premlite II w/ 10% gel + 3 % KCL, 5#'s /sk CSE + 2# sk/kolseal + 1/4#'s/sk Cello Flake
		mixed @ 11.0 ppg W / 3.43 cf/sk yield
2	400	50/50 poz W/ 2% Gel + 3% KCL, .5%EC1,1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD

CENTRALIZER & SCRATCHER PLACEMENT — SHOW MAKE & SPACING

Centralizers - Middle first, top second & third. Then every third collar for a total of 20.

COMPANY REPRESENTATIVE Floyd Mitchell DATE 12/18/03

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STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:	ML22058 SUNDANCE
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME:	SUNDANCE AREA
1. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER	8. WELL NAME and NUMBER: SUNDANCE ~~9-~~ 15-32-8-18
2. NAME OF OPERATOR: Inland Production Company	9. API NUMBER: 4304734465
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721	10. FIELD AND POOL, OR WILDCAT: Monument Butte
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 552 FSL 2191 FEL	COUNTY: Uintah
OTR/QTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SW/SE, 32, T8S, R18E	STATE: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
[ ] NOTICE OF INTENT (Submit in Duplicate)	[ ] ACIDIZE	[ ] DEEPEN	[ ] REPERFORATE CURRENT FORMATION
Approximate date work will	[ ] ALTER CASING	[ ] FRACTURE TREAT	[ ] SIDETRACK TO REPAIR WELL
	[ ] CASING REPAIR	[ ] NEW CONSTRUCTION	[ ] TEMPORARITLY ABANDON
	[ ] CHANGE TO PREVIOUS PLANS	[ ] OPERATOR CHANGE	[ ] TUBING REPAIR
	[ ] CHANGE TUBING	[ ] PLUG AND ABANDON	[ ] VENT OR FLAIR
[X] SUBSEQUENT REPORT (Submit Original Form Only)	[ ] CHANGE WELL NAME	[ ] PLUG BACK	[ ] WATER DISPOSAL
Date of Work Completion:	[ ] CHANGE WELL STATUS	[ ] PRODUCTION (START/STOP)	[ ] WATER SHUT-OFF
01/14/2004	[ ] COMMINGLE PRODUCING FORMATIONS	[ ] RECLAMATION OF WELL SITE	[X] OTHER: - Weekly Status Report
	[ ] CONVERT WELL TYPE	[ ] RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Status report for time period 12/31/03 -- 1/14/04 Subject well had completion procedures initiated in the Green River formation on 12/31/03 without the use of a service rig over the well. A cement bond log was run and a total of five Green River intervals were perforated and hydraulically fracture treated w/ 20/40 mesh sand. Perf intervals were #1 (5415-5431'), (5366-5389') (All 2 JSPF); #2 (5088-5106') (4 JSPF); #3 (4998-5005') (4 JSPF); #4 (4874-4877'), (4850-4856') (All 4 JSPF); #5 (4286-4294') (4 JSPF). Composite flow-through frac plugs were used between stages. Fracs were flowed back through chokes. A service rig was moved on well on 1/7/04. Bridge plugs were drilled out. Well was cleaned out to PBTD @ 5977'. Zones were swab tested for sand cleanup. A BHA & production tbg string were run in and anchored in well. End of tubing string @ 5504.56'. A new 1 1/2" bore rod pump was run in well on sucker rods. Well was placed on production via rod pump on 1/14/04.

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JAN 2 0 2004
DIV. OF OIL, GAS & MINING

NAME (PLEASE Martha Hall) TITLE Office Manager

SIGNATURE Martha Hall DATE January 16, 2004

(This space for State use only)

Inland
RESOURCES INC.

February 13, 2004

State of Utah, Division of Oil, Gas and Mining
Attn: Ms. Carol Daniels
P.O. Box 145801
Salt Lake City, Utah 84144-5801

Attn: Ms. Carol Daniels

Sundance State 15-32-8-18 (43-047-34465)
Uintah County, Utah

Dear Ms. Carol Daniels

Enclosed is a Well Completion or Recompletion Report and Log form (Form 3160-4). We are no longer sending Log copies since Pat Grissom of Phoenix Surveys is already doing so.

If you should have any questions, please contact me at (303) 382-4449.

Sincerely,

Brian Harris
Engineering Tech

Enclosures

cc: Bureau of Land Management
Vernal District Office, Division of Minerals
Attn: Edwin I. Forsman
170 South 500 East
Vernal, Utah 84078

Well File – Denver
Well File – Roosevelt
Patsy Barreau/Denver
Bob Jewett/Denver
Matt Richmond/Roosevelt

FORM 3160-4
(July 1992)

SUBMIT IN DUPLICATE* (See other instructions ons reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: ML-22058

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK
OIL WELL [X] GAS WELL [ ] DRY [ ] Other

1b. TYPE OF WELL
NEW WELL [X] WORK OVER [ ] DEEPEN [ ] PLUG BACK [ ] DIFF RESVR. [ ] Other

8. FARM OR LEASE NAME, WELL NO.: Sundance 15-32-8-18

2. NAME OF OPERATOR: INLAND RESOURCES INC.

9. WELL NO.: 43-047-34465

3. ADDRESS AND TELEPHONE NO.: 1401 17th St. Suite 1000 Denver, CO 80202

10. FIELD AND POOL OR WILDCAT: 8 Mile Flat North

4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.*)
At Surface: 552' FSL & 2191' FeL (SWSE) Sec. 32, Twp 8S, Rng 18E
At top prod. Interval reported below
At total depth

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 32, T8S, R18E

14. API NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
43-047-34465	3/14/202	Uintah	UT

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*		19. ELEV. CASINGHEAD
12/2/03	12/18/03	1/14/04	4909' GL	4921' KB	

20. TOTAL DEPTH, MD & TVD	21. PLUG BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
6009'	5977'		------->	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)*: Green River 4286' - 5431'

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Dual Induction Guard, SP, Compensated Density, Compensated Neutron, GR, Caliper, Cement Bond Log Rec 1-30-04

27. WAS WELL CORED: No

23. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8" - J-55	24#	311'	12-1/4"	To surface with 150 sx Class "G" cmt	
5-1/2" - J-55	15.5#	5990'	7-7/8"	300 sx Premlite II and 400 sx 50/50 Poz	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	EOT @ 5504'	TA @ 5337'

31. PERFORATION RECORD (Interval, size and number)

INTERVAL	SIZE	SPF/NUMBER
(LODC) 5366-89', 5415-31'	.038	2/78
(B1) 5088-5106'	.038	4/72
(C-sd) 4998'-5005'	.038	4/28
(D2) 4850-56', 4874-77'	.038	4/36
(GB4) 4286-4294'	.038	4/32

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5366'-5415'	Frac w/ 119,038# 20/40 sand in 847 bbls fluid.
5088'-5106'	Frac w/ 79,264# 20/40 sand in 595 bbls fluid.
4998'-5005'	Frac w/ 24,358# 20/40 sand in 257 bbls fluid.
4850-4877'	Frac w/ 30,775# 20/40 sand in 342 bbls fluid.
4286-4294'	Frac w/ 34,240# 20/40 sand in 321 bbls fluid.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)	WELL STATUS (Producing or shut-in)
1/14/04	2-1/2" x 1-1/2" x 15' RHAC Pump	PRODUCING

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL--BBLS.	GAS--MCF.	WATER--BBL.	GAS-OIL RATIO
10 day ave			----->	81	39	14	481

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)
		----->				

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Sold & Used for Fuel

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

FEB 17 2004

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Brian Harris TITLE Engineering Technician DATE 2/13/2004

DIVISION OF OIL, GAS & MINING

BDH

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
			Well Name **Sundance State 15-32-8-18**

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Garden Gulch Mkr	**3796'**	
Garden Gulch 1	**3843'**	
Garden Gulch 2	**4132'**	
Point 3 Mkr	**4395'**	
X Mkr	**4612'**	
Y-Mkr	**4646'**	
Douglas Creek Mkr	**4786'**	
BiCarbonate Mkr	**5028'**	
B Limestone Mkr		
Castle Peak	**5594'**	
Basal Carbonate	**6000'**	
Total Depth (LOGGERS	**6009'**	

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FEB 17 2004
DIV. OF OIL, GAS & MINING

FORM 9

STATE OF UTAH

DIVISION OF OIL, GAS, AND MINING

1. **SUNDRY NOTICES AND REPORTS ON WELLS**	5. LEASE DESIGNATION AND SERIAL NO. **ML-22058**
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use "APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBAL NAME **N/A**
OIL WELL [ ] GAS WELL [ ] OTHER [X]	7. UNIT AGREEMENT NAME **N/A**
2. NAME OF OPERATOR **INLAND PRODUCTION COMPANY**	8. WELL NAME and NUMBER **SUNDANCE 15-32-8-18**
3. ADDRESS AND TELEPHONE NUMBER **Rt. 3 Box 3630, Myton Utah 84052 435-646-3721**	9 API NUMBER **43-047-34465**
4. LOCATION OF WELL Footages **552 FSL 2191 FEL** QQ, SEC, T, R, M: **SW/SE Section 32, T8S R18E**	10 FIELD AND POOL, OR WILDCAT **8 MILE FLAT NORTH** COUNTY **UINTAH** STATE **UTAH**

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

NOTICE OF INTENT: (Submit in Duplicate)		SUBSEQUENT REPORT OF: (Submit Original Form Only)	
[ ] ABANDON	[ ] NEW CONSTRUCTION	[ ] ABANDON*	[ ] NEW CONSTRUCTION
[ ] REPAIR CASING	[ ] PULL OR ALTER CASING	[ ] REPAIR CASING	[ ] PULL OR ALTER CASING
[ ] CHANGE OF PLANS	[ ] RECOMPLETE	[ ] CHANGE OF PLANS	[ ] RECOMPLETE
[ ] CONVERT TO INJECTION	[ ] REPERFORATE	[ ] CONVERT TO INJECTION	[ ] REPERFORATE
[ ] FRACTURE TREAT OR ACIDIZE	[ ] VENT OR FLARE	[ ] FRACTURE TREAT OR ACIDIZE	[ ] VENT OR FLARE
[ ] MULTIPLE COMPLETION	[ ] WATER SHUT OFF	[ ] OTHER	
[X] OTHER **Dispose Water**		DATE WORK COMPLETED	

Report results of Multiple Completion and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.

*Must be accompanies by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.

Formation water is produced to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Inland's secondary recovery project.

Water not meeting quality criteria, is disposed at Inland's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

13.

NAME & SIGNATURE: Mandie Crozier TITLE Regulatory Specialist DATE 3/16/2004

Mandie Crozier

(This space for State use only)

4/94

* See Instructions On Reverse Side

Accepted by the Utah Division of Oil, Gas and Mining

FOR RECORD ONLY

RECEIVED

MAR 18 2004

DIV. OF OIL, GAS & MINING

Corporations Section
P.O.Box 13697
Austin, Texas 78711-3697

Geoffrey S. Connor
Secretary of State

Office of the Secretary of State

The undersigned, as Secretary of State of Texas, does hereby certify that the attached is a true and correct copy of each document on file in this office as described below:

Newfield Production Company
Filing Number: 41530400

Articles of Amendment September 02, 2004

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on September 10, 2004.

Secretary of State

ARTICLES OF AMENDMENT
TO THE
ARTICLES OF INCORPORATION
OF
INLAND PRODUCTION COMPANY

FILED
In the Office of the
Secretary of State of Texas
SEP 02 2004
Corporations Section

Pursuant to the provisions of Article 4.04 of the Texas Business Corporation Act (the "TBCA"), the undersigned corporation adopts the following articles of amendment to the articles of incorporation:

ARTICLE 1 – Name

The name of the corporation is Inland Production Company.

ARTICLE 2 – Amended Name

The following amendment to the Articles of Incorporation was approved by the Board of Directors and adopted by the shareholders of the corporation on August 27, 2004.

The amendment alters or changes Article One of the Articles of Incorporation to change the name of the corporation so that, as amended, Article One shall read in its entirety as follows:

"ARTICLE ONE – The name of the corporation is Newfield Production Company."

ARTICLE 3 – Effective Date of Filing

This document will become effective upon filing.

The holder of all of the shares outstanding and entitled to vote on said amendment has signed a consent in writing pursuant to Article 9.10 of the TBCA, adopting said amendment, and any written notice required has been given.

IN WITNESS WHEREOF, the undersigned corporation has executed these Articles of Amendment as of the 1st day of September, 2004.

INLAND RESOURCES INC.

By: Susan G. Riggs
Susan G. Riggs, Treasurer

Division of Oil, Gas and Mining

ROUTING

1. GLH
2. CDW
3. FILE

OPERATOR CHANGE WORKSHEET

011

Change of Operator (Well Sold) | Designation of Agent/Operator

X Operator Name Change | **Merger**

The operator of the well(s) listed below has changed, effective: **9/1/2004**

FROM: (Old Operator):	**TO:** (New Operator):
N5160-Inland Production Company	N2695-Newfield Production Company
Route 3 Box 3630	Route 3 Box 3630
Myton, UT 84052	Myton, UT 84052
Phone: 1-(435) 646-3721	Phone: 1-(435) 646-3721

CA No. **Unit:**

WELL(S)

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	
HANCOCK 14-23-4-1	23	040S	010W	4304733080	12331	Fee	OW	P	
HANCOCK 11-23-4-1	23	040S	010W	4304733081	12355	Fee	OW	P	
HANCOCK 4-26-4-1	26	040S	010W	4304733082	12492	Fee	OW	P	
ODEKIRK SPRINGS 1A-35-8-17	35	080S	170E	4304733549	12909	Federal	OW	P	
ODEKIRK SPRINGS 15-35-8-17	35	080S	170E	4304733550	13094	Federal	OW	P	
ODEKIRK SPRING 13-36-8-17	36	080S	170E	4304733076	12420	State	D	PA	
SUNDANCE FED 14-31-8-18	31	080S	180E	4304734287		Federal	OW	APD	K
FEDERAL 1-31-8-18	31	080S	180E	4304734494	13927	Federal	OW	P	K
FEDERAL 2-31-8-18	31	080S	180E	4304734495	13959	Federal	OW	OPS	K
SUNDANCE 7-32-8-18	32	080S	180E	4304734458	13987	State	OW	P	K
SUNDANCE 8-32-8-18	32	080S	180E	4304734459	14047	State	OW	P	K
SUNDANCE 9-32-8-18	32	080S	180E	4304734460	13988	State	OW	OPS	K
SUNDANCE 11-32-8-18	32	080S	180E	4304734461	13962	State	OW	P	K
SUNDANCE 12-32-8-18	32	080S	180E	4304734462	14031	State	OW	P	K
SUNDANCE 13-32-8-18	32	080S	180E	4304734463	13964	State	OW	P	K
SUNDANCE 14-32-8-18	32	080S	180E	4304734464	14046	State	OW	P	K
SUNDANCE 15-32-8-18	32	080S	180E	4304734465	13978	State	OW	P	K
SUNDANCE 16-32-8-18	32	080S	180E	4304734466	14028	State	OW	OPS	K
FEDERAL 2-6-9-18	06	090S	180E	4304734013		Federal	OW	APD	K
FEDERAL 3-6-9-18	06	090S	180E	4304734425		Federal	OW	APD	K

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 9/15/2004
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 9/15/2004

3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 2/23/2005
4. Is the new operator registered in the State of Utah: YES Business Number: 755627-0143
5. If **NO**, the operator was contacted contacted on:

6a. (R649-9-2)Waste Management Plan has been received on: IN PLACE

6b. Inspections of LA PA state/fee well sites complete on: waived

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM BIA

8. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: na/

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 2/23/2005

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 2/28/2005
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 2/28/2005
3. Bond information entered in RBDMS on: 2/28/2005
4. Fee/State wells attached to bond in RBDMS on: 2/28/2005
5. Injection Projects to new operator in RBDMS on: 2/28/2005
6. Receipt of Acceptance of Drilling Procedures for APD/New on: waived

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: UT 0056

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: 61BSBDH2912

FEE & STATE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 61BSBDH2919

2. The **FORMER** operator has requested a release of liability from their bond on: n/a*
The Division sent response by letter on: n/a

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

*Bond rider changed operator name from Inland Production Company to Newfield Production Company - **received 2/23/05**

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

TAKE PRIDE IN AMERICA

IN REPLY REFER TO
3180
UT-922

June 30, 2005

Newfield Production Company
Attn: Kelly L. Donohoue
1401 Seventeenth Street, Suite 1000
Denver, Colorado 80202

Gentlemen:

The Sundance (Green River) Unit Agreement, Uintah County, Utah, was approved June 30, 2005. This agreement has been designated No. UTU82472X, and is effective July 1, 2005. The unit area embraces 11,143.86 acres, more or less.

Pursuant to regulations issued and effective June 17, 1988, all operations within the Sundance (Green River) Unit will be covered by your nationwide (Utah) oil and gas bond No. 0056.

The following leases embrace lands included within the unit area:

UTU0075174	UTU39713	UTU65970*	UTU79013*
UTU16539*	UTU39714	UTU74404	UTU79014*
UTU16540	UTU44429	UTU74835	UTU80915
UTU17424*	UTU64806*	UTU74872*	UTU82205
UTU18043	UTU65969	UTU75234	

* Indicates lease to be considered for segregation by the Bureau of Land Management pursuant to Section 18 (g) of the unit agreement and Public Law 86-705.

All lands and interests by State of Utah, Cause No. 228-08 are fully committed. Docket No 2005-009

Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject leases which are committed hereto.

We are of the opinion that the agreement is necessary and advisable in the public interest and for the purpose of more properly conserving natural resources. Certification-Determination, signed by the School and Institutional Trust Land Administration for the State of Utah, is attached to the enclosed agreement. We request that you furnish the State of Utah and all other interested principals with appropriate evidence of this approval.

Sincerely,

/s/ Terry Catlin

Terry Catlin
Acting Chief, Branch of Fluid Minerals

Enclosure

bcc: Mary Higgins w/enclosure
MMS - Data Management Division (Attn: James Sykes)
Trust Lands Administration
Division of Oil, Gas and Mining
Field Manager - Vernal w/enclosure
File - Sundance (Green River) Unit w/enclosure
Agr. Sec. Chron
Fluid Chron
Central Files

UT922:TAThompson:tt:06/30/2005

Entity Form 6

"C" Change from one existing entity to another existing entity

API	Well	Sec	Twsp	Rng	Entity	Entity Eff Date
4304734465	SUNDANCE 15-32-8-18	32	080S	180E	13978 to 14844	9/20/2005
4304734466	SUNDANCE 16-32-8-18	32	080S	180E	14028 to 14844	9/20/2005
4304735090	FEDERAL 10-1-9-17	01	090S	170E	14421 to 14844	9/20/2005
4304735179	FEDERAL 9-1-9-17	01	090S	170E	14075 to 14844	9/20/2005
4304735180	FEDERAL 11-1-9-17	01	090S	170E	14105 to 14844	9/20/2005
4304735181	FEDERAL 13-1-9-17	01	090S	170E	14101 to 14844	9/20/2005
4304735182	FEDERAL 15-1-9-17	01	090S	170E	14094 to 14844	9/20/2005
4304735496	FEDERAL 16-1-9-17	01	090S	170E	14481 to 14844	9/20/2005
4304735156	FEDERAL 1-11-9-17	11	090S	170E	14321 to 14844	9/20/2005
4304735157	FEDERAL 7-11-9-17	11	090S	170E	14249 to 14844	9/20/2005
4304735158	FEDERAL 9-11-9-17	11	090S	170E	14250 to 14844	9/20/2005
4304735159	FEDERAL 11-11-9-17	11	090S	170E	14287 to 14844	9/20/2005
4304735160	FEDERAL 15-11-9-17	11	090S	170E	14302 to 14844	9/20/2005
4304735295	FEDERAL 3-11-9-17	11	090S	170E	14258 to 14844	9/20/2005
4304735497	FEDERAL 16-11-9-17	11	090S	170E	14568 to 14844	9/20/2005
4304735498	FEDERAL 14-11-9-17	11	090S	170E	14621 to 14844	9/20/2005
4304735500	FEDERAL 10-11-9-17	11	090S	170E	14587 to 14844	9/20/2005
4304735501	FEDERAL 8-11-9-17	11	090S	170E	14578 to 14844	9/20/2005
4304735502	FEDERAL 2-11-9-17	11	090S	170E	14588 to 14844	9/20/2005
4304735769	FEDERAL 6-11-9-17	11	090S	170E	14595 to 14844	9/20/2005
4304735162	FEDERAL 3-12-9-17	12	090S	170E	14343 to 14844	9/20/2005
4304735163	FEDERAL 1-12-9-17	12	090S	170E	14361 to 14844	9/20/2005
4304735164	FEDERAL 5-12-9-17	12	090S	170E	14344 to 14844	9/20/2005
4304735165	FEDERAL 7-12-9-17	12	090S	170E	14347 to 14844	9/20/2005
4304735166	FEDERAL 9-12-9-17	12	090S	170E	14391 to 14844	9/20/2005
4304735167	FEDERAL 11-12-9-17	12	090S	170E	14345 to 14844	9/20/2005
4304735168	FEDERAL 13-12-9-17	12	090S	170E	14305 to 14844	9/20/2005
4304735169	FEDERAL 15-12-9-17	12	090S	170E	14346 to 14844	9/20/2005
4304735516	FEDERAL 16-12-9-17	12	090S	170E	14569 to 14844	9/20/2005
4304735517	FEDERAL 14-12-9-17	12	090S	170E	14500 to 14844	9/20/2005
4304735518	FEDERAL 12-12-9-17	12	090S	170E	14497 to 14844	9/20/2005
4304735519	FEDERAL 10-12-9-17	12	090S	170E	14482 to 14844	9/20/2005
4304735520	FEDERAL 4-12-9-17	12	090S	170E	14553 to 14844	9/20/2005
4304735748	FEDERAL 8-12-9-17	12	090S	170E	14483 to 14844	9/20/2005
4304735749	FEDERAL 6-12-9-17	12	090S	170E	14498 to 14844	9/20/2005
4304735750	FEDERAL 2-12-9-17	12	090S	170E	14484 to 14844	9/20/2005

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18th STREET - SUITE 300
DENVER, CO 80202-2466
http://www.epa.gov/region08

DEC 0 5 2006

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

RECEIVED
DEC 1 1 2006
DIV. OF OIL, GAS & MINING

David Gerbig
Newfield Production Company
1401 Seventeenth Street
Suite 1000
Denver, CO 80202

43.047.34465
8S 18E 32

Re: Underground Injection Control Program
Final Permit: Sundance State 15-32-8-18
Uintah County, Utah
EPA Permit No. UT21034-07040

Dear Mr. Gerbig:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed Sundance State 15-32-8-18 injection well. A Statement of Basis, which discusses development of the conditions and requirements of the Permit, also is included.

The Public Comment period ended on NOV 2 4 2006. There were no comments on the Draft Permit received during the Public Notice period, and therefore the Final Permit becomes effective on the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect on the date that this Permit becomes effective.

Please note that under the terms of the Final Permit, you are authorized only to construct the proposed injection well, and must fulfill the "Prior to Commencing Injection" requirements of the Permit, Part II Section C Subpart 1 and obtain written Authorization to Inject prior to commencing injection. It is your responsibility to be familiar with and to comply with all provisions of the Final Permit.

The Permit and the authorization to inject are issued for the operating life of the well unless terminated (Part III, Section B). The EPA will review this Permit at least every five (5) years to determine whether action under 40 CFR § 144.36(a) is warranted.

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Emmett Schmitz of my staff at (303) 312-6174, or toll-free at (800) 227-8917, ext. 6174.

Sincerely,

Stephen S. Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

enclosure:
Final UIC Permit
Statement of Basis
Form 7520-7 Application to Transfer Permit
Form 7520-11 Monitoring Report
Form 7520-12 Well Rework Record
Form 7520-13 Plugging Record
Groundwater Section Guidance 35
Groundwater Section Guidance 37
Groundwater Section Guidance 39

cc: Letter only:

Maxine Natchees
Acting Chairperson
Uintah & Ouray Business Committee
Ute Indian Tribe

Chester Mills
Superintendent
Uintah & Ouray Indian Agency
U.S. Bureau of Indian Affairs

Final Permit & Statement of Basis:

Shaun Chapoose
Director
Land Use Dept.
Ute Indian Tribe

Lynn Becker
Director
Energy & Minerals Dept.
Ute Indian Tribe

Gilbert Hunt
Assistant Director
State of Utah - Natural Resources

Fluid Minerals Engineering Office
U.S. Bureau of Land Management
Vernal, Utah

all enclosures:

Michael Guinn
Vice President - Operations
Newfield Production Company
Myton, Utah

EPA

UNDERGROUND INJECTION CONTROL PROGRAM

PERMIT

PREPARED: November 2006

Permit No. UT21034-07040

Class II Enhanced Oil Recovery Injection Well

Sundance State 15-32-8-18
Uintah County, UT

Issued To

Newfield Production Company
1401 Seventeenth Street
Suite 1000
Denver, CO 80202

Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Newfield Production Company
1401 Seventeenth Street
Suite 1000
Denver, CO 80202

is authorized to construct and to operate the following Class II injection well or wells:

Sundance State 15-32-8-18
552' FSL & 2191' FEL, SWSE S32, T8S, R18E
Uintah County, UT

EPA UIC permits regulate the injection of fluids into underground injection wells so that the injection does not endanger underground sources of drinking water. EPA UIC permit conditions are based upon the authorities set forth in regulatory provisions at 40 CFR Parts 144 and 146, and address potential impacts to underground sources of drinking water.

Under 40 CFR Part 144, Subpart D, certain conditions apply to all UIC permits and may be incorporated either expressly or by reference. General permit conditions for which the content is mandatory and not subject to site-specific differences (40 CFR Parts 124, 144, 146 and 147) are not discussed in this document. Under 40 CFR §144.35, issuance of this permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize injury to persons or property or invasion of other private rights, or any infringement of other federal, state or local laws or regulations. EPA UIC permits may be issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR §§144.39, 144.40 and 144.41, and are subject to EPA review at least once every five (5) years to determine if action is required under 40 CFR §144.36(a).

This Permit is issued for the life of the well or wells unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for this program is delegated to an Indian Tribe or a State. Upon the effective date of delegation, all reports, notifications, questions and other compliance actions shall be directed to the Indian tribe or State Program Director or designee.

Issue Date: DEC 05 2006

Effective Date DEC 05 2006

for Stephen S. Tuber
Assistant Regional Administrator*
Office of Partnerships and Regulatory Assistance

*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

PART II. SPECIFIC PERMIT CONDITIONS

Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

1. Casing and Cement.

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

2. Injection Tubing and Packer.

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

3. Sampling and Monitoring Devices.

The Permittee shall install and maintain in good operating condition:

(a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and

(b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:

  (i) on the injection tubing; and

  (ii) on the tubing-casing annulus (TCA); and

(c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure specified in APPENDIX C is reached at the wellhead; and

(d) a non-resettable cumulative volume recorder attached to the injection line.

4. Well Logging and Testing

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

5. Postponement of Construction or Conversion

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate may be reissued.

6. Workovers and Alterations

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

Section B. MECHANICAL INTEGRITY

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

(a) There is no significant leak in the casing, tubing, or packer (Part I); and

(b) There is no significant fluid movement into an underground source of drinking water throught vertical channels adjacent to the injection well bore (Part II).

1. Demonstration of Mechanical Integrity (MI).

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

2. Mechanical Integrity Test Methods and Criteria

EPA-approved methods shall be used to demonstrate mechanical integrity. Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are available from EPA and will be provided upon request.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

3. Notification Prior to Testing.

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

4. Loss of Mechanical Integrity.

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit) and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

Section C. WELL OPERATION

INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.

Injection is approved under the following conditions:

1. Requirements Prior to Commencing Injection.

Well injection, including for new wells authorized by an Area Permit under 40 CFR 144.33 (c), may commence only after all well construction and pre-injection requirements herein have been met and approved. The Permittee may not commence injection until construction is complete, and

(a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-10 or 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and

(i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or

(ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

2. Injection Interval.

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

3. Injection Pressure Limitation

(a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into a USDW.

(b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permitee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

4. Injection Volume Limitation.

Injection volume is limited to the total volume specified in APPENDIX C.

5. Injection Fluid Limitation.

Injected fluids are limited to those identified in 40 CFR 144.6(b)(2) as fluids used for enhanced recovery of oil or natural gas, including those which are brought to the surface in connection with conventional oil or natural gas production that may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved for injection. This well is NOT approved for commercial brine injection, industrial waste fluid disposal or injection of hazardous waste as defined by CFR 40 Part 261. The Permittee shall provide a listing of the sources of injected fluids in accordance with the reporting requirements in Part II Section D Paragraph 4 and APPENDIX D of this Permit.

6. Tubing-Casing Annulus (TCA)

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

1. Monitoring Parameters, Frequency, Records and Reports.

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

(a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;

(b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;

(c) the analytical techniques or methods used for analysis.

2. Monitoring Methods.

(a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.

(b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.

(c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.

(d) Pressures are to be measured in pounds per square inch (psi).

(e) Fluid volumes are to be measured in standard oil field barrels (bbl).

(f) Fluid rates are to be measured in barrels per day (bbl/day).

3. Records Retention.

(a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.

(b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.

(c) The Permittee shall retain records at the location designated in APPENDIX D.

4. Annual Reports.

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

Section E. PLUGGING AND ABANDONMENT

1. Notification of Well Abandonment, Conversion or Closure.

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

2. Well Plugging Requirements

Prior to abandonment, the injection well shall be plugged with cement in a manner which isolates the injection zone and prevents the movement of fluids into or between underground sources of drinking water, and in accordance with 40 CFR 146.10 and other applicable federal, State or local law or regulations. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director.

3. Approved Plugging and Abandonment Plan.

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

4. Forty Five (45) Day Notice of Plugging and Abandonment.

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abanonment plan.

5. Plugging and Abandonment Report.

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

(a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or

(b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

6. Inactive Wells.

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

(a) Provides written notice to the Director;

(b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and

(c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

PART III. CONDITIONS APPLICABLE TO ALL PERMITS

Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

Section B. CHANGES TO PERMIT CONDITIONS

1. Modification, Reissuance, or Termination.

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

2. Conversions.

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

3. Transfer of Permit.

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

4. Permittee Change of Address.

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

5. Construction Changes, Workovers, Logging and Testing Data

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging , or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

Section C. SEVERABILITY

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

Section D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

Section E. GENERAL PERMIT REQUIREMENTS

1. Duty to Comply.

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

2. *Duty to Reapply.*

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

3. *Need to Halt or Reduce Activity Not a Defense.*

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

4. *Duty to Mitigate.*

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

5. *Proper Operation and Maintenance.*

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

6. *Permit Actions.*

This Permit may be modified, revoked and reissued or teminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. *Property Rights.*

This Permit does not convey any property rights of any sort, or any exclusive privilege.

8. *Duty to Provide Information.*

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

9. *Inspection and Entry.*

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,

(d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

10. Signatory Requirements.

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

11. Reporting Requirements.

(a) Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility; and prior to commencing such changes.

(b) Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Monitoring Reports. Monitoring results shall be reported at the intervals specified in this Permit.

(d) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.

(e) Twenty-four hour reporting. The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:

(i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or

(ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

(f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website http://www.nrc.uscg.mil/index.htm.

(g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.

(h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

Section F. FINANCIAL RESPONSIBILITY

1. Method of Providing Financial Responsibility.

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

2. Insolvency.

In the event of:

(a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or

(b) suspension or revocation of the authority of the trustee institution to act as trustee; or

(c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

APPENDIX A

WELL CONSTRUCTION REQUIREMENTS

See diagram.

The Sundance State No. 15-32-8-18 was drilled to a total depth of 6009 (KB) feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 311 feet in a 12-1/4 inch hole using 150 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 5991 feet (KB) in a 7-7/8 inch hole with 300 sacks of Premium Lite II and 400 sacks of 50/50 poz mix. This well construction is considered adequate to protect USDW's.

The EPA calculates the top of cement as 1473 feet from the surface.

The schematic diagram shows the proposed current injection perforations in the Garden Gulch and Douglas Creek Members of the Green River Formation. Additional perforations may be added at a later time between the depths of 3802 feet and the top of the Wasatch Formation (Estimated to be 6125 feet) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

The packer will be required to be set no higher than 100 feet above the top perforation.

Sundance 15-32-8-18

Spud Date: 12/2/03
Put on Production: 1/14/04
GL: 4909' KB: 4921'

Initial Production: 81 BOPD,
39 MCFD, 14 BWPD

Proposed Injection
Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"
GRADE: J-55
WEIGHT: 24#
LENGTH: 7 jts. (301.14')
DEPTH LANDED: 311.14' KB
HOLE SIZE: 12-1/4"
CEMENT DATA: 150 sxs Class G cmt, est 4 bbls cmt to surf.

Cement Top @ 210'

<250' Base USDWs

-311'

TOC/EPA 1473'

PRODUCTION CASING

CSG SIZE: 5-1/2"
GRADE: J-55
WEIGHT: 15.5#
LENGTH: 136 jts. (5992.96')
DEPTH LANDED: 5990.96' KB
HOLE SIZE: 7-7/8"
CEMENT DATA: 300 sxs Prem. Lite II & 400 sxs 50/50 POZ.
CEMENT TOP AT: 210'

Green River 2269'

-3650'-3802' Confining Zone
-3802' Garden Gulch

TUBING

SIZE/GRADE/WT: 2-7/8" / J-55 / 6.5#
NO. OF JOINTS: 165 jts (5325.18')
TUBING ANCHOR: 5337.18' KB
NO. OF JOINTS: 3 jts (97.68')
SEATING NIPPLE: 2-7/8" (1.10')
SN LANDED AT: 5437.66' KB
NO. OF JOINTS: 2 jts (65.35')
TOTAL STRING LENGTH: EOT @ 5504.56' W/12' KB

Packer @ 4251'
4286'-4294'

80% Bond 4665'-4688'

-4794' Douglas Creek

4850'-4856'
4874'-4877'
4908'-4005'
5088'-5106'
5366'-5380'
5415'-5431'

PBTD @ 5977'
SHOE @ 5991'
TD @ 6000'

-6000' Basal Carbonate

Est. 6125' Top Wasatch

FRAC JOB

1/05/04 5366'-5431' **Frac LODC sands as follows:**
119,038# 20/40 sand in 847 bbls Lightning frac 17 fluid. Treated @ avg press of 2250 psi w/avg rate of 24.4 BPM. ISIP 2580 psi. Calc flush: 5364 gal. Actual flush: 5376 gal

1/05/04 5088'-5106' **Frac B1 sands as follows:**
59,261# 20/40 sand in 595 bbls Lightning frac 17 fluid. Treated @ avg press of 1424 psi w/avg rate of 24.4 BPM. ISIP 1900 psi. Calc flush: 5086 gal. Actual flush: 5124 gal

1/08/04 4908'-5005' **Frac C sands as follows:**
24,358# 20/40 sand in 275 bbls Lightning frac 17 fluid. Treated @ avg press of 2200 psi w/avg rate of 24.7 BPM. ISIP 2330 psi. Calc flush: 4996 gal. Actual flush: 4998 gal

1/08/04 4850'-4877' **Frac D2 sands as follows:**
30,775# 20/40 sand in 342 bbls Lightning frac 17 fluid. Treated @ avg press of 3120 psi w/avg rate of 26 BPM. ISIP 2080 psi. Calc flush: 4848 gal. Actual flush: 4847 gal.

1/08/04 4286'-4294' **Frac GB4 sands as follows:**
34,240# 20/40 sand in 321 bbls Lightning frac 17 fluid. Treated @ avg press of 2450 psi w/avg rate of 24.7 BPM. ISIP 2020 psi. Calc flush: 4284 gal. Actual flush: 4200 gal

PERFORATION RECORD

12/31/03	5415'-5431'	2 JSPF	32 holes
12/31/03	5366'-5380'	2 JSPF	28 holes
1/08/04	5088'-5106'	4 JSPF	72 holes
1/08/04	4908'-5005'	4 JSPF	28 holes
1/08/04	4874'-4877'	4 JSPF	12 holes
1/08/04	4850'-4856'	4 JSPF	24 holes
1/08/04	4286'-4294'	4 JSPF	32 holes

NEWFIELD

Sundance 15-32-8-18

552' FSL & 2191' FEL

SWSE Section 32-T8S-R18E

Uintah Co, Utah

API #: 43-047-34465; Lease #ML-22058

APPENDIX B

LOGGING AND TESTING REQUIREMENTS

Logs.
Logs will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

NO LOGGING REQUIREMENTS

Tests.
Tests will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

WELL NAME: Sundance State 15-32-8-18

TYPE OF TEST	DATE DUE
Radioactive Tracer Survey (2)	Within 180 days following commencement of injection and at least once every five (5) years thereafter.
Step Rate Test	Within 180 days following commencement of injection.
Standard Annulus Pressure	Prior to authorization to inject and at least once every five (5) years thereafter.
Pore Pressure	Prior to authorization to inject.

APPENDIX C

OPERATING REQUIREMENTS

MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

WELL NAME	MAXIMUM ALLOWED INJECTION PRESSURE (psi) ZONE 1 (Upper)
Sundance State 15-32-8-18	

INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

WELL NAME: Sundance State 15-32-8-18

FORMATION NAME	APPROVED INJECTION INTERVAL (KB, ft) TOP	BOTTOM	FRACTURE GRADIENT (psi/ft)
Green River	3,802.00	6,125.00	0.810

ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

APPENDIX D

MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE MONTHLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS	
OBSERVE AND RECORD	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)

ANNUALLY	
ANALYZE	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH

ANNUALLY	
REPORT	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and averaged annulus pressure(s) (psig)
	Each month's averaged injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

Records of all monitoring activities must be retained and made available for inspection at the following location:

Newfield Production Company
1401 Seventeenth Street - Suite 1000
Denver, CO 80202

APPENDIX E

PLUGGING AND ABANDONMENT REQUIREMENTS

See diagram.

All cement plugs will be set with tubing.

9.2 ppg plugging gel, or fresh water weighted with bentonite or treated brine will be placed between all cement plugs.

The following Plugging and Abandonment Plan, as proposed by the permittee, is predicated on the permittee not revising the injection perforations cited on the schematic diagram of well construction/conversion. Should the uppermost perforations (4286 feet to 4294 feet) be modified in construction, the EPA will modify the P&A Plan accordingly.

PLUG NO. 1: A Cast Iron Bridge Plug (CIBP) at 4191 feet with 100 feet of Class "G" cement on CIBP.

PLUG NO. 2: A Class "G" cement plug from 2000 feet to 2200 feet. This plug will cover both a water zone and the requirement to secure a plug at the top of the Green River Formation.

PLUG NO. 3: Place a cement plug within the 5-1/2 inch casing and the 5-1/2 inch X 8-5/8 inch casing annulus from the surface to a depth of 361 feet.

Attachment Q-2

Sundance 15-32-8-18

Spud Date: 12/2/03
Put on Production: 1/14/04
GL: 4909' KB: 4921'

Initial Production: 81 BOPD, 39 MCFD, 14 BWPD

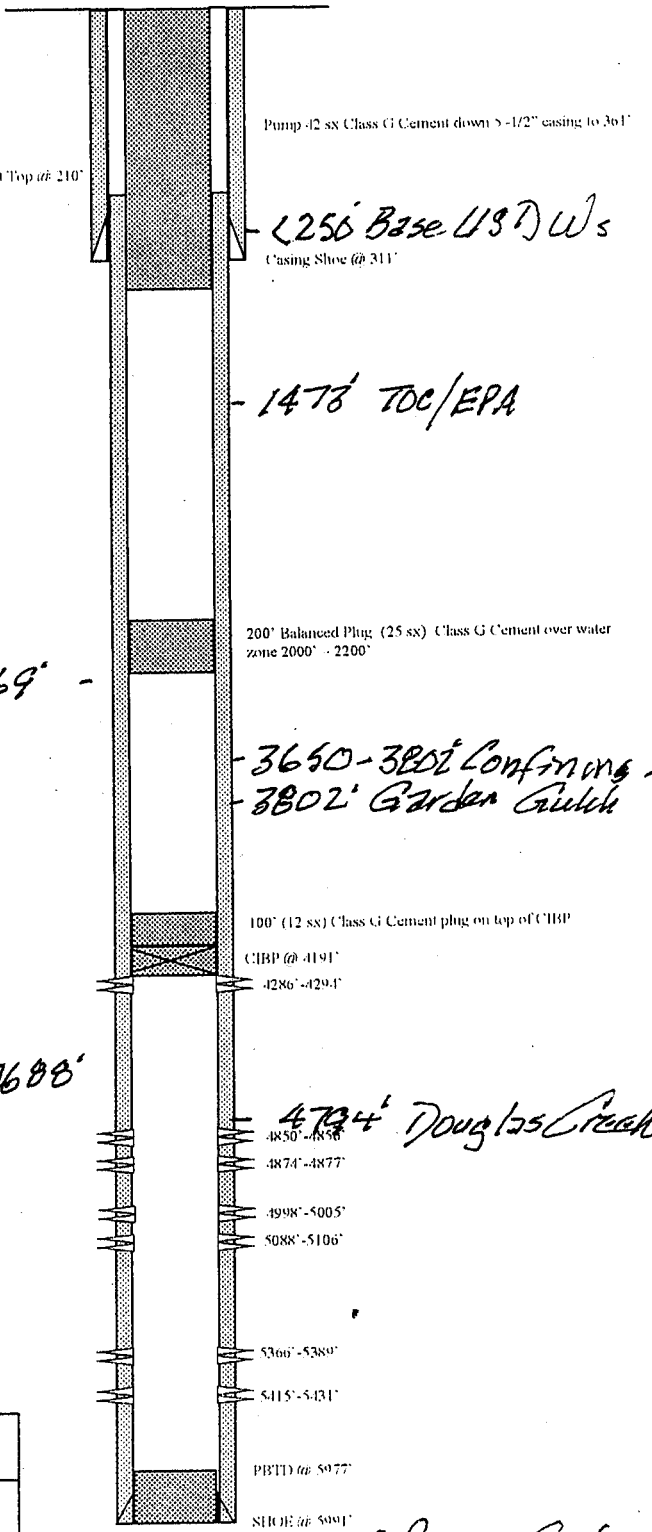
Proposed P&A
Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"
GRADE: J-55
WEIGHT: 24#
LENGTH: 7 jts. (301.14')
DEPTH LANDED: 311.14' KB
HOLE SIZE: 12-1/4"
CEMENT DATA: 150 sxs Class G cmt, est 1 bbls cmt to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"
GRADE: J-55
WEIGHT: 15.5#
LENGTH: 136 jts. (5992.96')
DEPTH LANDED: 5990.96' KB
HOLE SIZE: 7-7/8"
CEMENT DATA: 300 sxs Prem. Lite II & 400 sxs 50/50 POZ.
CEMENT TOP AT: 210'



NEWFIELD

Sundance 15-32-8-18

552' FSL & 2191' FEL
SWSE Section 32-T8S-R18E
Uintah Co, Utah
API #43-047-34105 Lease #ML-22058

APPENDIX F

CORRECTIVE ACTION REQUIREMENTS

No corrective action is deemed necessary for this project.

STATEMENT OF BASIS

NEWFIELD PRODUCTION COMPANY
SUNDANCE STATE 15-32-8-18
UINTAH COUNTY, UT

EPA PERMIT NO. UT21034-07040

CONTACT: Emmett Schmitz
U. S. Environmental Protection Agency
Ground Water Program, 8P-W-GW
999 18th Street, Suite 300
Denver, Colorado 80202-2466
Telephone: 1-800-227-8917 ext. 6174

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

EPA UIC permits regulate the injection of fluids into underground injection wells so that the injection does not endanger underground sources of drinking water. EPA UIC permit conditions are based upon the authorities set forth in regulatory provisions at 40 CFR Parts 144 and 146, and address potential impacts to underground sources of drinking water. Under 40 CFR 144.35 Issuance of this permit does not convey any property rights of any sort or any exclusive privilege, nor authorize injury to persons or property of invasion of other private rights, or any infringement of other federal, state or local laws or regulations. Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which the content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

PART I. General Information and Description of Facility

Newfield Production Company
1401 Seventeenth Street
Suite 1000
Denver, CO 80202

on

November 3, 2005

submitted an application for an Underground Injection Control (UIC) Program Permit or Permit Modification for the following injection well or wells:

Sundance State 15-32-8-18
552' FSL & 2191' FEL, SWSE S32, T8S, R18E
Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The application, including the required information and data necessary to issue or modify a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed and determined by EPA to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

The Sundance State No. 15-32-8-18 is currently an active Garden Gulch-Douglas Creek Members of the Green River Formation oil well. The applicant intends to convert this facility to an enhanced recovery injection well.

TABLE 1.1

WELL STATUS / DATE OF OPERATION

CONVERSION WELLS

Well Name	Well Status	Date of Operation
Sundance State 15-32-8-18	Conversion	N/A

PART II. Permit Considerations (40 CFR 146.24)

The proposed injection well is located in the Newfield Production Company Greater Monument Butte area near the center of the broad, gently northward dipping south flank of the Uinta Basin. The beds dip at about 200'/mile, and there are no known surface folds or faults in the field. The lower 600' to 800'of the Uinta Formation, generally consisting of 5' to 20' thick brown lenticular fluvial sandstone and interbedded varicolored shales, outcrops at the surface in this area. The Uinta is underlain by the Green River Formation which consists of lake (lacustrine) margin sandstones, limestone and shale beds that were deposited along the edges and on the broad level floor of Lake Uinta as it expanded and contracted through time. Underlying the Green River Formation is the Wasatch Formation, which is approximately 2400' thick in this area and consists of red alluvial shales and siltstone with scattered lenticular sandstones usually 10' to 50' thick. Below the Wasatch Formation is the Mesaverde Formation; a series of interbedded continental deposits of shale, sandstone, and coal. Water samples from Mesaverde sands in the nearby Natural Buttes Unit yield highly saline water.

The Uinta Basin is a topographic and structural trough encompassing an area of more than 9300 square mi (14,900 km) in northeast Utah. The basin is sharply asymmetrical, with a steep north flank bounded by the east-west-trending Uinta Mountains, and a gently dipping south flank. The Uinta Basin formed in Paleocene to Eocene time, creating a large area of internal drainage which was filled by ancestral Lake Uinta. Deposition in and around Lake Uinta consisted of open- to marginal-lacustrine sediments that make up the Green River Formation. Alluvial red-bed deposits that are laterally equivalent to and intertongue with the Green River make up the Colton Formation (Wasatch). More than 450 million barrels of oil (63 MT) have been produced from the Green River and Wasatch Formations in the Uinta Basin. The southern shore of Lake Uinta was very broad and flat, which allowed large transgressive and regressive shifts in the shoreline in response to climatic and tectonic-induced rise and fall of the lake. The cyclic nature of Green River deposition in the southern shore area resulted in numerous stacked deltaic deposits. Distributary-mouth bars, distributary channels, and near-shore bars are the primary producing sandstone reservoirs in the area (Ref: "Reservoir Characterization of the Lower Green River Formation, Southwest Uinta Basin, Utah Biannual Technical Progress Report 4/1/99 - 9/30/99", by C. D. Morgan, Program Manager, November 1999, Contract DE-AC26-98BC15103). The Tertiary Duchesne River Formation alluvium generally is present at the surface in this area.

Throughout the current Newfield Production Company area of enhanced recovery injection activity, i.e., T8-9S - R15-19E, Green River Formation water analyses generally exhibit total dissolved (TDS) content well in excess of 10,000 mg/l. A few recent applications for well conversion to enhanced recovery injection contain Green River water analyses withTDS approximating 10,000 mg/l. The State of Utah-Natural Resources ascribes low TDS values to several possibilities involving dilution of Green River water with high TDS values, e,g., recharge of the Green River Formation via Green River Formation outcrop on the Book Cliffs/Roan Cliffs; injection of very low TDS Johnson Water District Reservoir source water; and percolation of surface water via deep-seated Gilsonite veins penetrating lower Green River Members.

Geologic Setting (TABLE 2.1)

TABLE 2.1
GEOLOGIC SETTING
Sundance State 15-32-8-18

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta	0.00	2,269.00	< 10,000.00	Interbedded lacustrine carbonate-sand-shale with fluvial sand and shale.
Green River	2,269.00	6,125.00	12,801.00	Interbedded lacustrine carbonate-sand-shale with fluvial sand and shale. Top of Wasatch is an estimate.

Proposed Injection Zone(s) (TABLE 2.2)

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2:

Injection will occur into an injection zone that is separated from USDWs by a confining zone which is free of known open faults or fractures within the Area of Review.

The approved interval for enhanced recovery injection is located between the top of the Garden Gulch Member (3802 feet) to the top of the Wasatch Formation which has an estimated top of 6125 feet.

TABLE 2.2
INJECTION ZONES
Sundance State 15-32-8-18

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River	3,802.00	6,125.00	12,801.00	0.810		N/A

* C - Currently Exempted
E - Previously Exempted
P - Proposed Exemption
N/A - Not Applicable

Confining Zone(s) (TABLE 2.3)

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

The 152-foot shale Confining Zone is located at the top of the garden Gulch Member within the depths of 3650 feet to 3802 feet.

TABLE 2.3
CONFINING ZONES
Sundance State 15-32-8-18

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Green River	Shale	3,650.00	3,802.00

Underground Sources of Drinking Water (USDWs) (TABLE 2.4)
Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

The State of Utah "Water Wells and Springs", http//NRWRT1.STATE.UT.US, identifies no public water supply wells within the one-quarter (1/4) mile Area-of-Review (AOR) around the Sundance State No. 15-32-8-18.

Technical Publication No. 92: State of Utah, Department of Natural Resources, cites the base of Underground Sources of Drinking Water (USDW) in the Uinta Formation, approximately 250 feet from the surface.

TABLE 2.4
UNDERGROUND SOURCES OF DRINKING WATER (USDW)
Sundance State 15-32-8-18

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta	Fluvial sand and shale interbedded with lacustrine carbonate-sand-shale.	0.00	250.00	< 10,000.00

PART III. Well Construction (40 CFR 146.22)

he Sundance State No. 15-32-8-18 was drilled to a total depth of 6009 (KB) feet in the Basal Carbonate Member of the Green River Formation.

Surface casing (8-5/8 inch) was set at a depth of 311 feet in a 12-1/4 inch hole using 150 sacks of Class "G" cement which was circulated to the surface.

Production casing (5-1/2 inch) was set at a depth of 5991 feet (KB) in a 7-7/8 inch hole with 300 sacks of Premium Lite II and 400 sacks of 50/50 poz mix. This well construction is considered adequate to protect USDW's.

The EPA calculates the top of cement as 1473 feet from the surface.

The schematic diagram shows the proposed current injection perforations in the Garden Gulch and Douglas Creek Members of the Green River Formation. Additional perforations may be added at a later time between the depths of 3802 feet and the top of the Wasatch Formation (Estimated to be 6125 feet) provided the operator first notifies the Director and later submits an updated well completion report (EPA Form 7520-12) and schematic diagram.

The packer will be required to be set no higher than 100 feet above the top perforation.

TABLE 3.1
WELL CONSTRUCTION REQUIREMENTS
Sundance State 15-32-8-18

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Production	7.88	5.50	0.00 - 5,991.00	1,473.00 - 5,991.00
Surface	12.25	8.63	0.00 - 311.00	0.00 - 311.00

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

Casing and Cementing (TABLE 3.1)

The construction plan for the well or wells proposed for conversion to an injection well was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction and conversion details for the well or wells are shown in TABLE 3.1.

Tubing and Packer

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

Tubing-Casing Annulus (TCA)

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

The tubing/casing annulus must be kept closed at all times so that it can be monitored as required under conditions of the Permit.

Monitoring Devices

The permittee will be required to install and maintain wellhead equipment that allows for monitoring pressures and providing access for sampling the injected fluid. Required equipment may include but is not limited to: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) fittings or pressure gauges attached to the injection tubing and the TCA for monitoring the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

TABLE 4.1
AOR AND CORRECTIVE ACTION

Well Name	Type	Status (Abandoned Y/N)	Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
State NGC No. 33-32D	Producer	No	7,000.00	1,750.00	No
Sundance 14-32-8-18	Producer	No	6,135.00	1,598.00	No

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

Area Of Review

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

Corrective Action Plan

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

TABLE 4.1 lists the wells in the AOR, and shows the well type, operating status, depth, top of casing cement and whether a CAP is required for this well.

PART V. Well Operation Requirements (40 CFR 146.23)

TABLE 5.1
INJECTION ZONE PRESSURES
Sundance State 15-32-8-18

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Green River	4,286.00	0.810	1,605

Approved Injection Fluid

The approved injection fluid is limited to Class II injection well fluids pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Injection of non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, is prohibited.

The proposed injectate is a blend of source water from the Johnson Water District reservoir and produced Green River water from wells proximate to the Sundance State No. 15-32-8-18.

Injection Pressure Limitation

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit,

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

FP = formation fracture pressure (measured at surface)
fg = fracture gradient (from submitted data or tests)
sg = specific gravity (of injected fluid)
d = depth to top of injection zone (or top perforation)

Injection Volume Limitation

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

There will be no restrictions on the cumulative volume of the authorized fluid injected into the Green River interval 3802 feet to the top of the Wasatch Formation which is estimated to be 6125 feet.

Mechanical Integrity (40 CFR 146.8)

An injection well has mechanical integrity if:

1. there is no significant leak in the casing, tubing, or packer (Part I); and
2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependent upon well-specific conditions as explained below.

Well construction and site-specific conditions dictate the following requirements for Mechanical Integrity (MI) demonstrations:

PART I MI: Internal MI will be demonstrated prior to beginning injection. Since this well is constructed with a standard casing, tubing, and packer configuration, a successful mechanical integrity test (MIT) is required to take place at least once every five (5) years. A demonstration of Part I MI is also required prior to resuming injection following any workover operation that affects the casing, tubing or packer. Part I MI may be demonstrated by a standard tubing-casing annulus pressure test using the maximum permitted injection pressure or 1000 psi, which ever is less, with a ten (10) percent or less pressure loss over thirty (30) minutes.

PART II MI: - The CBL indicates that cement does not meet minimum requirements needed to demonstrate zone isolation (at least 18 feet of continuous 80% bond, or better) through the confining zone. Therefore, further testing for Part II MI will be required prior to injection and at least once every five years thereafter. The demonstration shall be by temperature survey or other approved test. Approved tests for demonstrating Part II MI include a temperature survey, noise log or oxygen activation log, and Region 8 may also accept results of a radioactive tracer survey under certain circumstances.

PART VI. Monitoring, Recordkeeping and Reporting Requirements

Injection Well Monitoring Program

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, injection flow rate and cumulative fluid volume, and the maximum and average value for each must be determined for each month. This information is required to be reported annually as part of the Annual Report to the Director.

PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)

Plugging and Abandonment Plan

Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with other applicable federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520 13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. The plugging and abandonment plan is described in Appendix E of the Permit.

All cement plugs will be set with tubing.

9.2 ppg plugging gel, or fresh water weighted with bentonite or treated brine will be placed between all cement plugs.

The following Plugging and Abandonment Plan, as proposed by the permittee, is predicated on the permittee not revising the injection perforations cited on the schematic diagram of well construction/conversion. Should the uppermost perforations (4286 feet to 4294 feet) be modified in construction, the EPA will modify the P&A Plan accordingly.

PLUG NO. 1: A Cast Iron Bridge Plug (CIBP) at 4191 feet with 100 feet of Class "G" cement on CIBP.

PLUG NO. 2: A Class "G" cement plug from 2000 feet to 2200 feet. This plug will cover both a water zone and the requirement to secure a plug at the top of the Green River Formation.

PLUG NO. 3: Place a cement plug within the 5-1/2 inch casing and the 5-1/2 inch X 8-5/8 inch casing annulus from the surface to a depth of 361 feet.

PART VIII. Financial Responsibility (40 CFR 144.52)

Demonstration of Financial Responsibility

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial

responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

Financial Statement that was reviewed and approved by the EPA on September 25, 2006.

Financial Statement, received April 22, 2005

Evidence of continuing financial responsibility is required to be submitted to the Director annually.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: UTAH STATE ML-22058
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME: SUNDANCE UNIT
8. WELL NAME and NUMBER: SUNDANCE ST 15-32-8-18
9. API NUMBER: 4304734465
10. FIELD AND POOL, OR WILDCAT: MONUMENT BUTTE

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL [x] GAS WELL [ ] OTHER

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

4. LOCATION OF WELL:
FOOTAGES AT SURFACE: 552 FSL 2191 FEL COUNTY: UINTAH
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWSE, 32, T8S, R18E STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
[ ] NOTICE OF INTENT (Submit in Duplicate)	[ ] ACIDIZE	[ ] DEEPEN	[ ] REPERFORATE CURRENT FORMATION
Approximate date work will	[ ] ALTER CASING	[ ] FRACTURE TREAT	[ ] SIDETRACK TO REPAIR WELL
	[ ] CASING REPAIR	[ ] NEW CONSTRUCTION	[ ] TEMPORARILY ABANDON
	[ ] CHANGE TO PREVIOUS PLANS	[ ] OPERATOR CHANGE	[ ] TUBING REPAIR
	[ ] CHANGE TUBING	[ ] PLUG AND ABANDON	[ ] VENT OR FLAIR
[x] SUBSEQUENT REPORT (Submit Original Form Only)	[ ] CHANGE WELL NAME	[ ] PLUG BACK	[ ] WATER DISPOSAL
Date of Work Completion:	[x] CHANGE WELL STATUS	[ ] PRODUCTION (START/STOP)	[ ] WATER SHUT-OFF
	[ ] COMMINGLE PRODUCING FORMATIONS	[ ] RECLAMATION OF WELL SITE	[ ] OTHER: -
01/31/2007	[x] CONVERT WELL TYPE	[ ] RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The subject well has been converted from a producing oil well to an injection well on 1/31/07.
On 2-8-07 Dan Jackson with the EPA was contacted concerning the initial MIT on the above listed well. Permission was given at that time to perform the test on 2/8/07. On 2/8/07 the casing was pressured up to 1420 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 60 psig during the test. There was not an EPA representative available to witness the test. EPA# UT 21034-07040 API# 43-047-34465

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

NAME (PLEASE PRINT) Callie Ross TITLE Production Clerk

SIGNATURE Callie Ross DATE 02/09/2007

(This space for State use only)

RECEIVED
FEB 13 2007
DIV. OF OIL, GAS & MINING

Mechanical Integrity Test
Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency
Underground Injection Control Program
999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness: _____ Date: 02/08/07
Test conducted by: Dale Giles
Others present: _____

Well Name: Sundance 15-32-8-18 Type: ER SWD Status: AC TA UC
Field: Sundance Unit
Location: _____ Sec: 32 T 8 N (S) R 18 (E) / W County: Uintah State: UT
Operator: Newfield production Co.
Last MIT: / / Maximum Allowable Pressure: _____ PSIG

Is this a regularly scheduled test? [ ] Yes [ ] No
Initial test for permit? [X] Yes [ ] No
Test after well rework? [ ] Yes [ ] No
Well injecting during test? [ ] Yes [ ] No If Yes, rate: _____ bpd

Pre-test casing/tubing annulus pressure: 0 psig

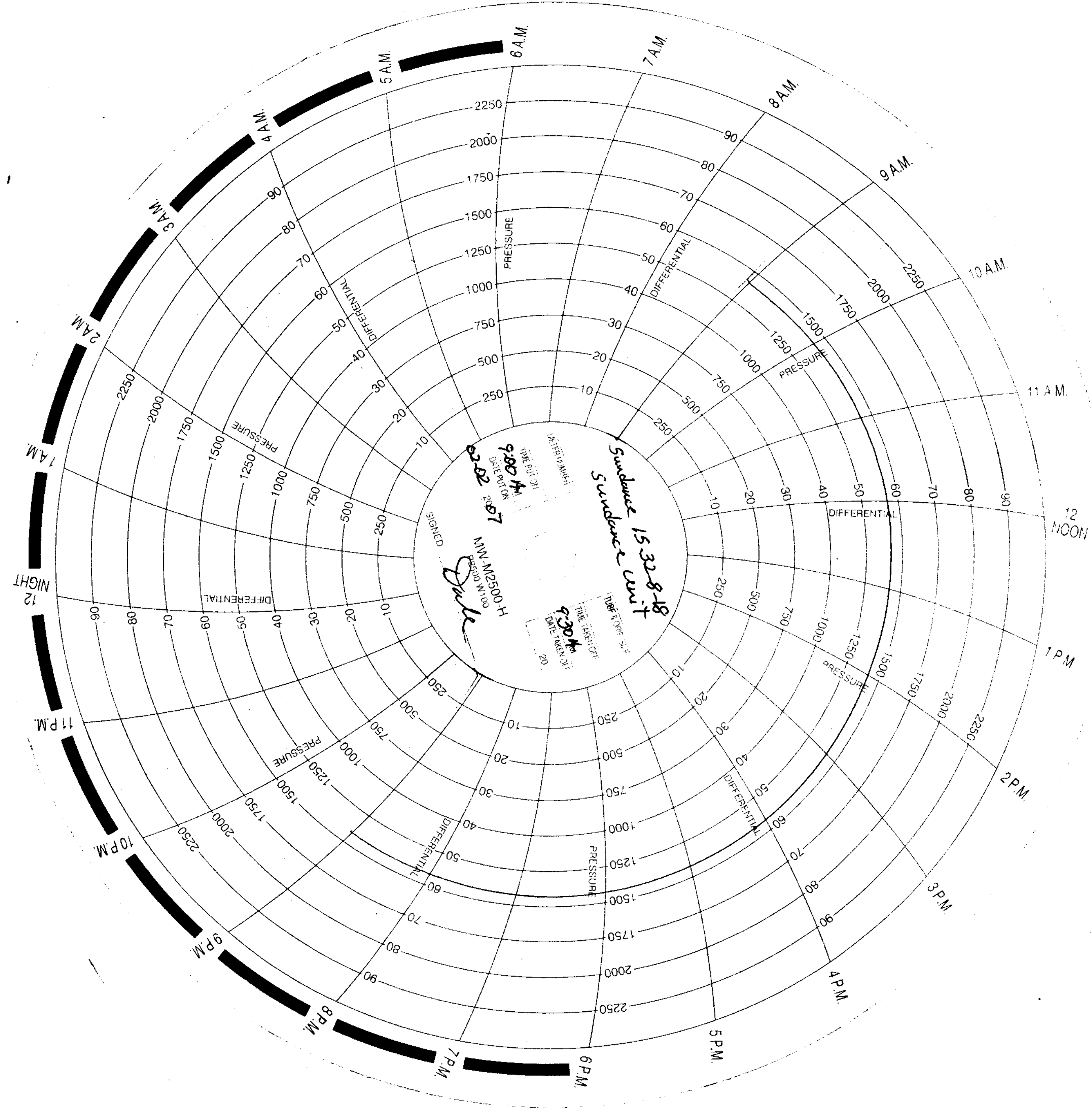
MIT DATA TABLE	Test #1	Test #2	Test #3
TUBING	*PRESSURE*		
Initial Pressure	60 psig	psig	psig
End of test pressure	60 psig	psig	psig
CASING / TUBING	*ANNULUS*	*PRESSURE*	
0 minutes	1420 psig	psig	psig
5 minutes	1420 psig	psig	psig
10 minutes	1420 psig	psig	psig
15 minutes	1420 psig	psig	psig
20 minutes	1420 psig	psig	psig
25 minutes	1420 psig	psig	psig
30 minutes	1420 psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
RESULT	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail

Does the annulus pressure build back up after the test ? [ ] Yes [X] No

MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness:



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P2500 W100
TIME PUT ON
9:00 Am
DATE PUT ON
02-02 2007
TIME TAKEN OFF
9:30 Am
DATE TAKEN OFF
SIGNED
Sundance 15 32-8-18
Sundance Unit

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

FEB 2 8 2007

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

Mr. Mike Guinn
Vice President - Operations
Newfield Production Company
Route 3 - Box 3630
Myton, UT 84502

RE: **180-Day Limited Authorization to Inject**
Sundance State No. 15-32-8-18
EPA Permit No. UT21034-07040
Uintah County, Utah
43-047-34465
8S 18E 32

Dear Mr. Guinn:

The Newfield Production Company (Newfield) February 8, 2007 submission of **Prior to Commencing Injection** documents did contain all information required to fulfill the Environmental Protection Agency's (EPA) requirements, as cited in the Final Permit UT21034-07040. The submitted data included an EPA Well Rework Form (Form No. 7520-12), a Part I (Internal) Mechanical Integrity Test, and an injection zone pore pressure. All requirements were reviewed and approved by the EPA on February 14, 2007.

The EPA is hereby authorizing injection into the Sundance State No. 15-32-8-18 for a limited period of up to one hundred and eighty (180) calendar days, herein referred to as the "Limited Authorized Period". **The 180-Day "Limited Authorized Period" will commence upon the first date of enhanced recovery injection.** The permittee is responsible for notifying Emmett Schmitz, of my office, by letter within fifteen (15) working days of the date that enhanced recovery injection began. The initial maximum allowable injection pressure (MAIP) shall be **1605 psig**.

RECEIVED
MAR 0 5 2007
DIV. OF OIL, GAS & MINING

Because the cement bond log submitted for this well did not show an adequate interval of 80% or greater bond index cement through the confining zone overlying the Garden Gulch Member, **the operator is required to demonstrate Part II (External) Mechanical Integrity (Part II MI) within the 180-day "Limited Authorized Period".** Approved tests for demonstrating Part II (External) MI include a Temperature Survey, a Noise Log or Oxygen Activation Log, and Region 8 may also accept results of a Radioactive Tracer Survey under certain circumstances. The "Limited Authorized Period" allows injection for the purpose of stabilizing the injection formation pressure prior to demonstrating Part II (External) MI, which is necessary because the proposed injection zone is under-pressured due to previous oil production from the zone, and the tests rely on stable formation pressure. Results of tests shall be submitted to and written approval with authority to re-commence injection received from EPA prior to resuming injection following the "Limited Authorized Period". Copies of current Region 8 Guidelines for conducting Part II (External) Mechanical Integrity Tests will be submitted upon request.

Should you choose to apply for an increase to the MAIP, at any future date, **a demonstration of Part II (External) MI** must be conducted **in addition to the Step-Rate Test**. You must receive prior authorization from the Director in order to inject at pressures greater than the permitted MAIP during the test(s).

If you have any questions in regard to the above action, please contact Emmett Schmitz at 1-800-227-8917 (Ext. 6174), or 303-312-6174. Results from the Part II (External) MI Test, should be mailed directly to the **ATTENTION: EMMETT SCHMITZ**, at the letterhead address citing **MAIL CODE: 8P-W-GW** very prominently.

Sincerely,

Stephen S. Tuber
Assistant Regional Administrator
Office Of Partnerships and Regulatory Assistance

cc: David Gerbig
Operations Engineer
Newfield Production Company
Denver, CO 80202

Maxine Natchees
Chairperson
Uintah & Ouray Business Committee
Ute Indian Tribe

Lynn Becker
Director
Energy & Minerals Department
Ute Indian Tribe

Shaun Chapoose
Director
Land Use Dept.
Ute Indian Tribe

Chester Mills
Superintendent
U.S. Bureau of Indian Affairs
Uintah & Ouray Indian Agency

Gilbert Hunt
Assistant Director
State of Utah - Natural Resources
Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office
U.S. Bureau of Land Management
Vernal, Utah

Irene Cuchs
Councilwoman
Uintah & Ouray Business Committee
Ute Indian Tribe

Smiley Arrowchis
Councilman
Uintah & Ouray Business Committee
Ute Indian Tribe

Ronald Groves
Councilman
Uintah & Ouray Business Committee
Ute Indian Tribe

Richard Jenks, Jr.
Councilman
Uintah & Ouray Business Committee
Ute Indian Tribe

Francis Poowegup
Councilman
Uintah & Ouray Business Committee
Ute Indian Tribe

Mr. Nathan Wiser
8ENF-UFO

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER:
UTAH STATE ML-22058
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME:
SUNDANCE UNIT
8. WELL NAME and NUMBER:
SUNDANCE ~~ST~~ 15-32-8-18
9. API NUMBER:
4304734465
10. FIELD AND POOL, OR WILDCAT:
MONUMENT BUTTE

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL [x] GAS WELL [ ] OTHER

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

4. LOCATION OF WELL:
FOOTAGES AT SURFACE: 552 FSL 2191 FEL COUNTY: UINTAH
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWSE, 32, T8S, R18E STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
[ ] NOTICE OF INTENT (Submit in Duplicate)	[ ] ACIDIZE	[ ] DEEPEN	[ ] REPERFORATE CURRENT FORMATION
Approximate date work will	[ ] ALTER CASING	[ ] FRACTURE TREAT	[ ] SIDETRACK TO REPAIR WELL
	[ ] CASING REPAIR	[ ] NEW CONSTRUCTION	[ ] TEMPORARITLY ABANDON
	[ ] CHANGE TO PREVIOUS PLANS	[ ] OPERATOR CHANGE	[ ] TUBING REPAIR
	[ ] CHANGE TUBING	[ ] PLUG AND ABANDON	[ ] VENT OR FLAIR
[x] SUBSEQUENT REPORT (Submit Original Form Only)	[ ] CHANGE WELL NAME	[ ] PLUG BACK	[ ] WATER DISPOSAL
Date of Work Completion:	[x] CHANGE WELL STATUS	[ ] PRODUCTION (START/STOP)	[ ] WATER SHUT-OFF
03/28/2007	[ ] COMMINGLE PRODUCING FORMATIONS	[ ] RECLAMATION OF WELL SITE	[x] OTHER: - Put Well on Injection
	[x] CONVERT WELL TYPE	[ ] RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above referenced well was put on injection at 12:00 p.m. on 3/28/07.

UIC Permit #UT21034-07040

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

NAME (PLEASE PRINT) Mandie Crozier TITLE Regulatory Specialist

SIGNATURE Mandie Crozier DATE 03/29/2007

(This space for State use only)

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MAR 3 0 2007
DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER:
UTAH STATE ML-22058
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME:
SUNDANCE UNIT
8. WELL NAME and NUMBER:
SUNDANCE ST 15-32-8-18
9. API NUMBER:
4304734465
10. FIELD AND POOL, OR WILDCAT:
MONUMENT BUTTE

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER WI

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

4. LOCATION OF WELL:
FOOTAGES AT SURFACE: 552 FSL 2191 FEL COUNTY: UINTAH
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWSE, 32, T8S, R18E STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☒ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARITLY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLAIR
☒ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of Work Completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/STOP)	☐ WATER SHUT-OFF
08/23/2007	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☒ OTHER: - Step Rate Test
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

A step rate test was conducted on the subject well on August 17, 2007. Results from the test indicate that the fracture gradient is .795 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed to 1520 psi.

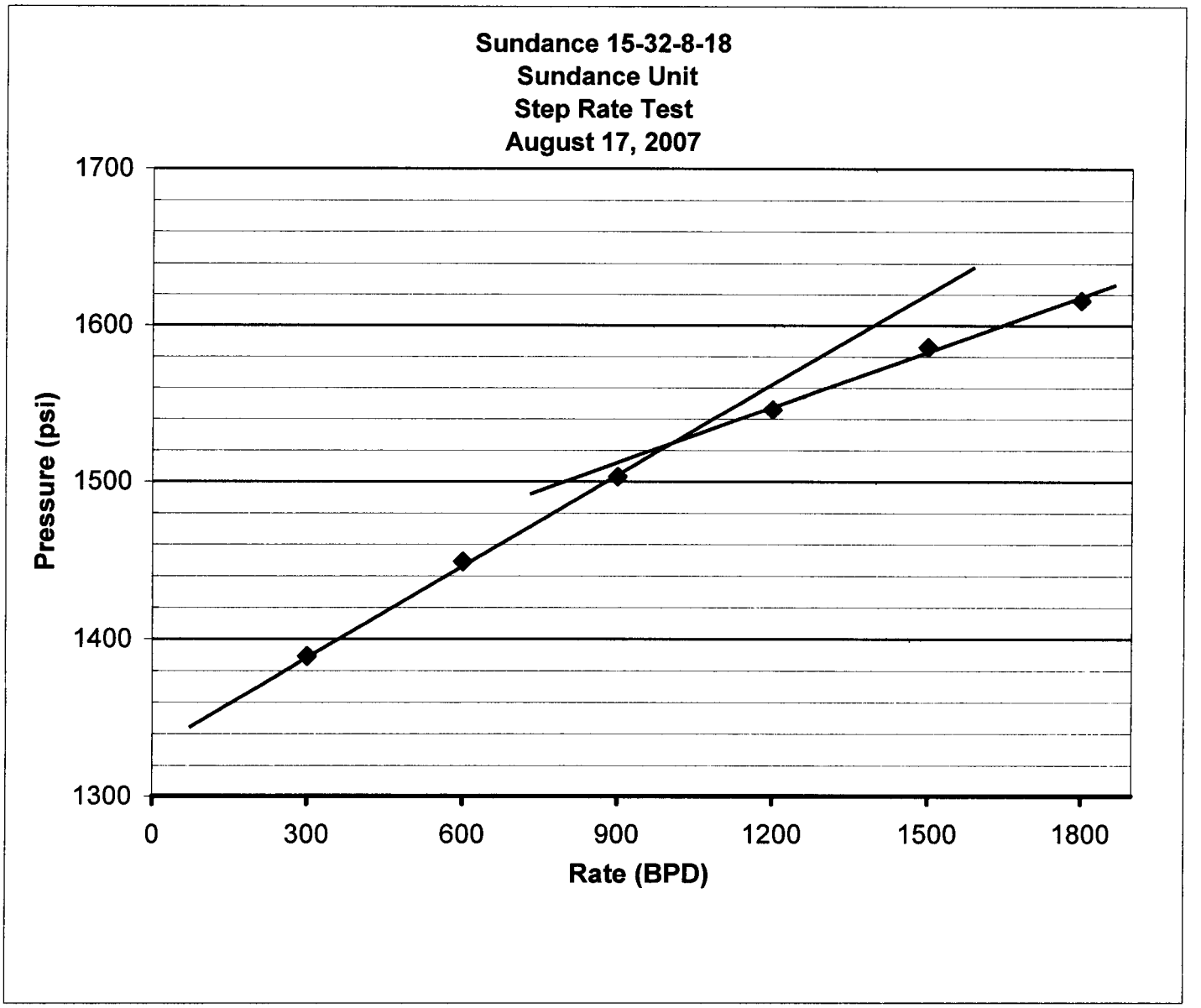
Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

NAME (PLEASE PRINT) Cheyenne Bateman TITLE Well Analyst Foreman

SIGNATURE [signature] DATE 08/23/2007

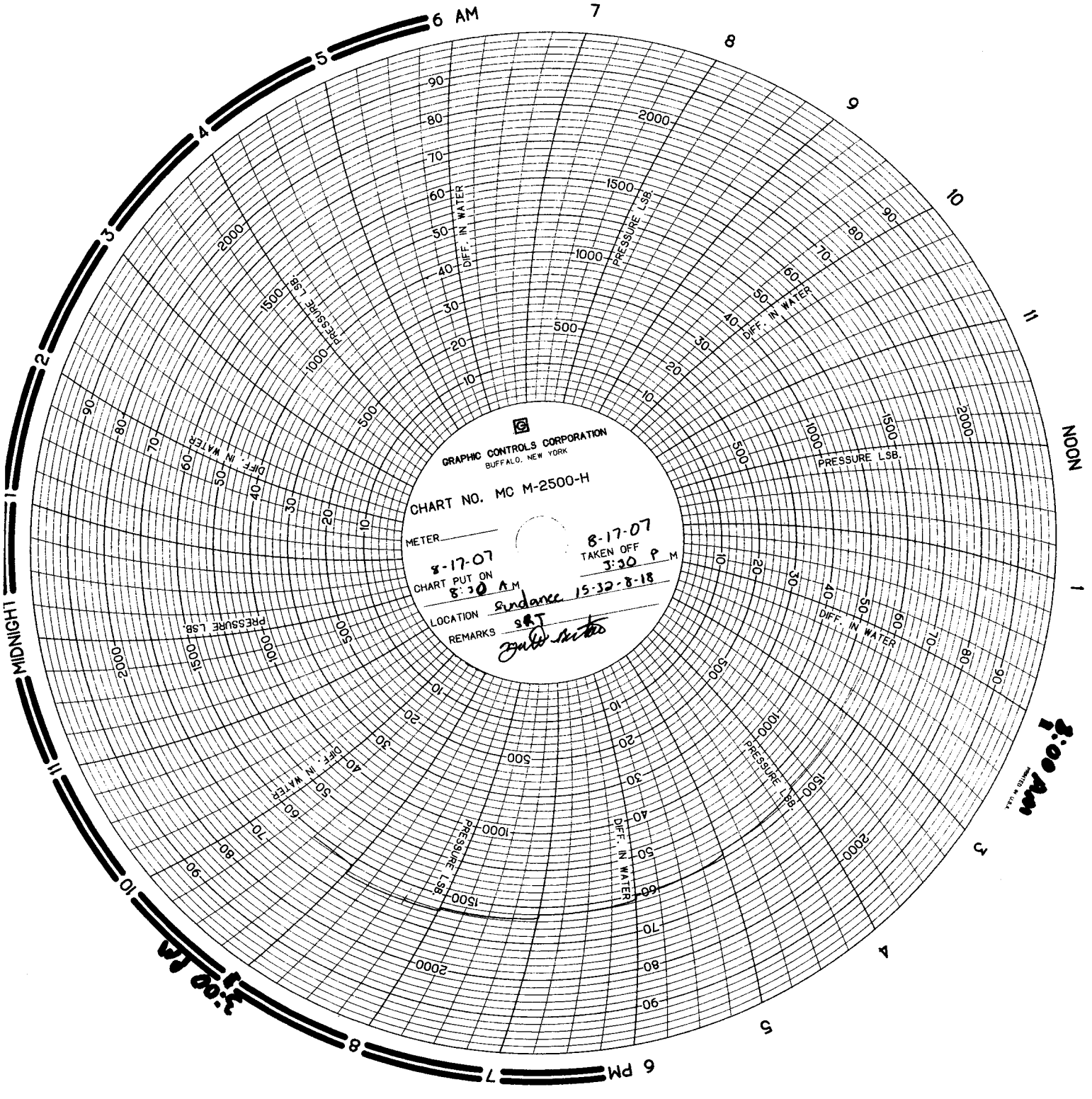
(This space for State use only)

RECEIVED
AUG 2 4 2007
DIV. OF OIL, GAS & MINING



Start Pressure:	1358	psi
Instantaneous Shut In Pressure (ISIP):	1555	psi
Top Perforation:	4286	feet
Fracture pressure (Pfp):	1525	psi
FG:	0.795	psi/ft

Step	Rate(bpd)	Pressure(psi)
1	300	1389
2	600	1449
3	900	1503
4	1200	1546
5	1500	1586
6	1800	1616


GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC M-2500-H
METER
CHART PUT ON 8-17-07 8:30 A M
TAKEN OFF 8-17-07 3:30 P M
LOCATION Sundance 15-32-8-18
REMARKS SRT
PRESSURE LSB.
DIFF. IN WATER
6 AM
NOON
MIDNIGHT
6 PM

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: UTAH STATE ML-22058

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: GMBU

1. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER

8. WELL NAME and NUMBER: SUNDANCE ST 15-32-8-18

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 4304734465

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER: 435.646.3721

10. FIELD AND POOL, OR WILDCAT: MONUMENT BUTTE

4. LOCATION OF WELL:

FOOTAGES AT SURFACE: 552 FSL 2191 FEL

COUNTY: UINTAH

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SWSE, 32, T8S, R18E

STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

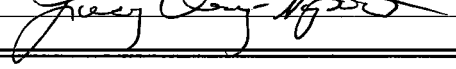
TYPE OF SUBMISSION	TYPE OF ACTION		
[ ] NOTICE OF INTENT (Submit in Duplicate)	[ ] ACIDIZE	[ ] DEEPEN	[ ] REPERFORATE CURRENT FORMATION
Approximate date work will	[ ] ALTER CASING	[ ] FRACTURE TREAT	[ ] SIDETRACK TO REPAIR WELL
	[ ] CASING REPAIR	[ ] NEW CONSTRUCTION	[ ] TEMPORARITLY ABANDON
	[ ] CHANGE TO PREVIOUS PLANS	[ ] OPERATOR CHANGE	[ ] TUBING REPAIR
	[ ] CHANGE TUBING	[ ] PLUG AND ABANDON	[ ] VENT OR FLAIR
[X] SUBSEQUENT REPORT (Submit Original Form Only)	[ ] CHANGE WELL NAME	[ ] PLUG BACK	[ ] WATER DISPOSAL
Date of Work Completion:	[ ] CHANGE WELL STATUS	[ ] PRODUCTION (START/STOP)	[ ] WATER SHUT-OFF
04/08/2010	[ ] COMMINGLE PRODUCING FORMATIONS	[ ] RECLAMATION OF WELL SITE	[X] OTHER: - Step Rate Test
	[ ] CONVERT WELL TYPE	[ ] RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

A step rate test was conducted on the subject well on April 8,2010. Results from the test indicate that the fracture gradient is .853 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed from 1520 psi to 1770 psi.

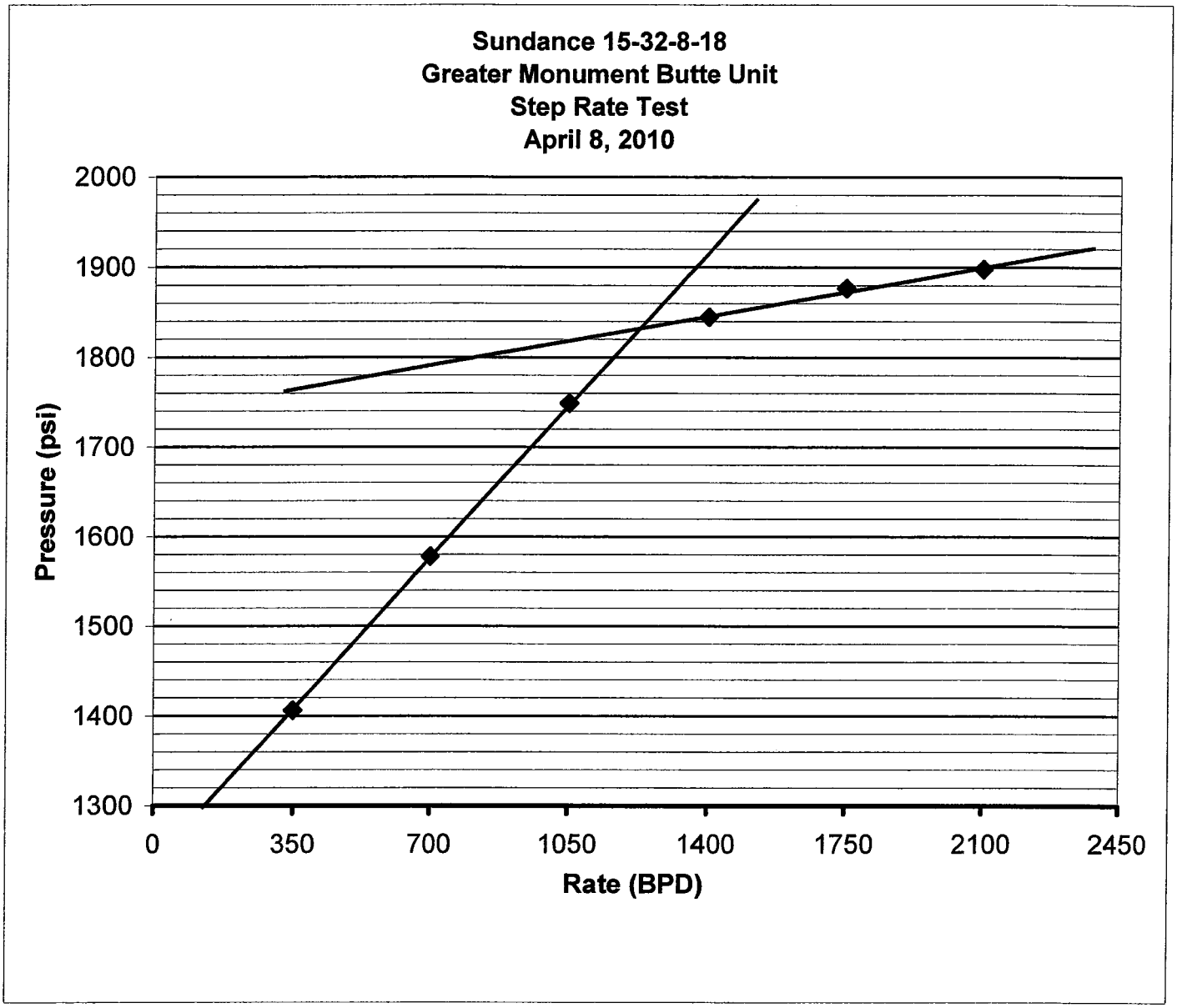
Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY

NAME (PLEASE PRINT) Lucy Chavez-Naupoto TITLE Administrative Assistant

SIGNATURE  DATE 04/19/2010

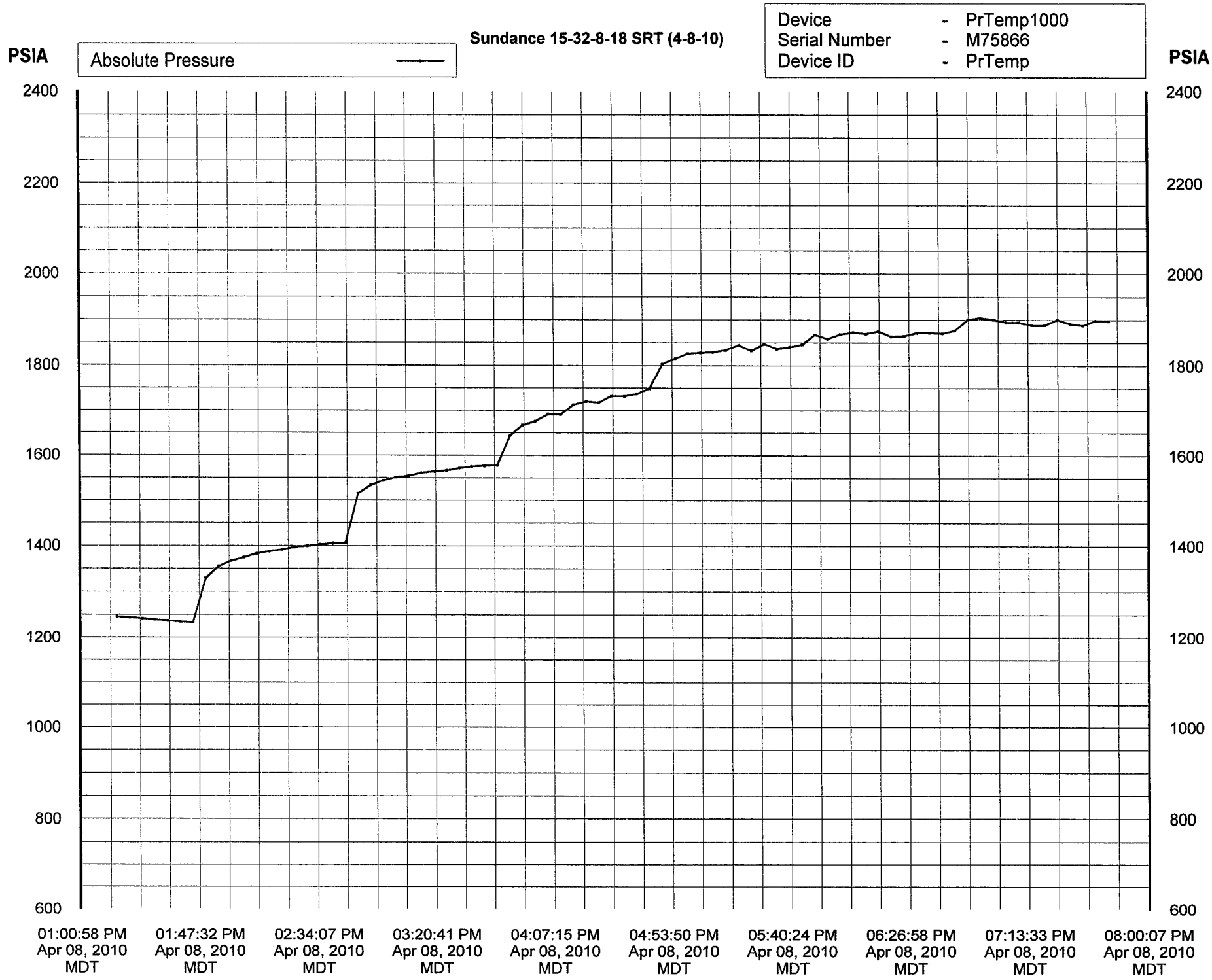
(This space for State use only)

RECEIVED
APR 26 2010
DIV. OF OIL, GAS & MINING



Start Pressure:	1233	psi
Instantaneous Shut In Pressure (ISIP):	1774	psi
Top Perforation:	4286	feet
Fracture pressure (Pfp):	1830	psi
FG:	0.866	psi/ft

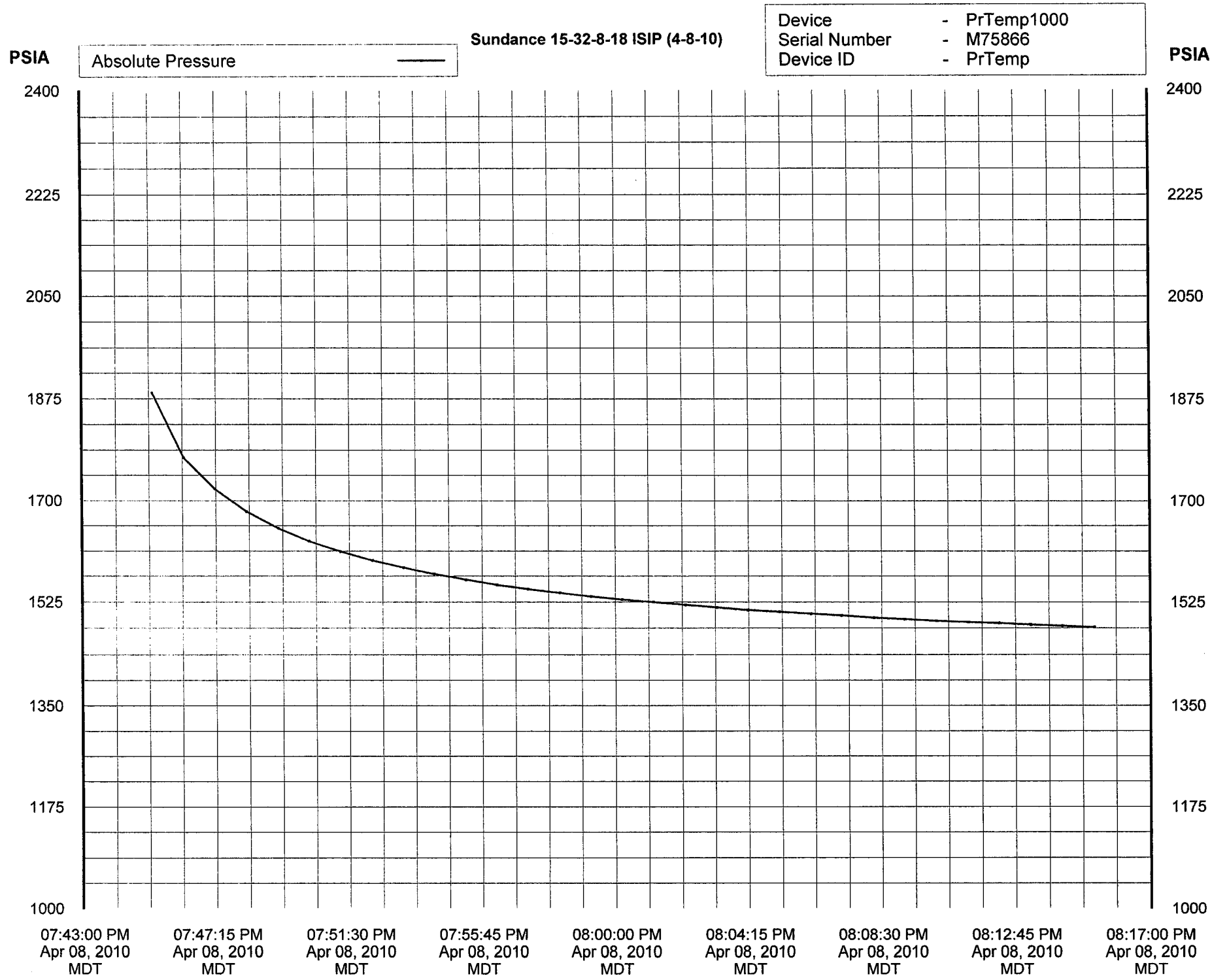
Step	Rate(bpd)	Pressure(psi)
1	350	1406
2	700	1578
3	1050	1749
4	1400	1845
5	1750	1877
6	2100	1898


Sundance 15-32-8-18 SRT (4-8-10)
Device - PrTemp1000
Serial Number - M75866
Device ID - PrTemp
PSIA
Absolute Pressure
2400
2200
2000
1800
1600
1400
1200
1000
800
600
01:00:58 PM Apr 08, 2010 MDT
01:47:32 PM Apr 08, 2010 MDT
02:34:07 PM Apr 08, 2010 MDT
03:20:41 PM Apr 08, 2010 MDT
04:07:15 PM Apr 08, 2010 MDT
04:53:50 PM Apr 08, 2010 MDT
05:40:24 PM Apr 08, 2010 MDT
06:26:58 PM Apr 08, 2010 MDT
07:13:33 PM Apr 08, 2010 MDT
08:00:07 PM Apr 08, 2010 MDT

Report Name:	PrTemp1000 Data Table
Report Date:	Apr 09, 2010 08:49:12 AM MDT
File Name:	S:\Welinfo\PTC® Instruments 2.00\Sundance 15-32-8-18 SRT (4-8-10).csv
Title:	Sundance 15-32-8-18 SRT (4-8-10)
Device:	PrTemp1000 - Temperature and Pressure Recorder
Hardware Revision:	REV2C (64K)
Serial Number:	M75866
Device ID:	PrTemp
Data Start Date:	Apr 08, 2010 01:15:03 PM MDT
Data End Date:	Apr 08, 2010 07:45:02 PM MDT
Reading Rate:	2 Seconds
Readings:	1 to 79 of 79
Last Calibration Date:	May 22, 2009
Next Calibration Date:	May 22, 2010

Reading	Date and Time (MDT)	Absolute Pressure	Annotation
1	Apr 08, 2010 01:15:03 PM	1245.400 PSIA	
2	Apr 08, 2010 01:20:02 PM	1243.400 PSIA	
3	Apr 08, 2010 01:25:03 PM	1241.600 PSIA	
4	Apr 08, 2010 01:30:02 PM	1238.800 PSIA	
5	Apr 08, 2010 01:35:03 PM	1236.400 PSIA	
6	Apr 08, 2010 01:40:01 PM	1234.600 PSIA	
7	Apr 08, 2010 01:45:03 PM	1232.600 PSIA	
8	Apr 08, 2010 01:50:02 PM	1328.800 PSIA	
9	Apr 08, 2010 01:55:02 PM	1354.400 PSIA	
10	Apr 08, 2010 02:00:03 PM	1366.400 PSIA	
11	Apr 08, 2010 02:05:02 PM	1374.000 PSIA	
12	Apr 08, 2010 02:10:03 PM	1382.200 PSIA	
13	Apr 08, 2010 02:15:01 PM	1387.000 PSIA	
14	Apr 08, 2010 02:20:02 PM	1391.200 PSIA	
15	Apr 08, 2010 02:25:01 PM	1396.600 PSIA	
16	Apr 08, 2010 02:30:02 PM	1399.200 PSIA	
17	Apr 08, 2010 02:35:03 PM	1402.200 PSIA	
18	Apr 08, 2010 02:40:03 PM	1405.000 PSIA	
19	Apr 08, 2010 02:45:03 PM	1405.600 PSIA	
20	Apr 08, 2010 02:50:01 PM	1514.800 PSIA	
21	Apr 08, 2010 02:55:02 PM	1533.400 PSIA	
22	Apr 08, 2010 03:00:01 PM	1543.800 PSIA	
23	Apr 08, 2010 03:05:02 PM	1550.800 PSIA	
24	Apr 08, 2010 03:10:01 PM	1554.200 PSIA	
25	Apr 08, 2010 03:15:02 PM	1560.800 PSIA	
26	Apr 08, 2010 03:20:03 PM	1564.000 PSIA	
27	Apr 08, 2010 03:25:02 PM	1566.200 PSIA	
28	Apr 08, 2010 03:30:02 PM	1571.600 PSIA	
29	Apr 08, 2010 03:35:01 PM	1575.000 PSIA	
30	Apr 08, 2010 03:40:02 PM	1577.000 PSIA	
31	Apr 08, 2010 03:45:01 PM	1577.600 PSIA	
32	Apr 08, 2010 03:50:02 PM	1643.200 PSIA	
33	Apr 08, 2010 03:55:01 PM	1667.000 PSIA	
34	Apr 08, 2010 04:00:02 PM	1675.800 PSIA	
35	Apr 08, 2010 04:05:02 PM	1691.600 PSIA	
36	Apr 08, 2010 04:10:02 PM	1690.800 PSIA	
37	Apr 08, 2010 04:15:02 PM	1712.400 PSIA	
38	Apr 08, 2010 04:20:02 PM	1719.600 PSIA	
39	Apr 08, 2010 04:25:02 PM	1717.200 PSIA	
40	Apr 08, 2010 04:30:01 PM	1732.200 PSIA	
41	Apr 08, 2010 04:35:02 PM	1731.600 PSIA	
42	Apr 08, 2010 04:40:01 PM	1737.400 PSIA	
43	Apr 08, 2010 04:45:02 PM	1749.200 PSIA	
44	Apr 08, 2010 04:50:02 PM	1803.000 PSIA	
45	Apr 08, 2010 04:55:03 PM	1814.200 PSIA	
46	Apr 08, 2010 05:00:03 PM	1825.800 PSIA	
47	Apr 08, 2010 05:05:01 PM	1827.600 PSIA	
48	Apr 08, 2010 05:10:02 PM	1829.000 PSIA	
49	Apr 08, 2010 05:15:01 PM	1833.600 PSIA	
50	Apr 08, 2010 05:20:02 PM	1843.800 PSIA	
51	Apr 08, 2010 05:25:02 PM	1832.000 PSIA	
52	Apr 08, 2010 05:30:03 PM	1846.400 PSIA	
53	Apr 08, 2010 05:35:02 PM	1835.800 PSIA	
54	Apr 08, 2010 05:40:03 PM	1839.800 PSIA	
55	Apr 08, 2010 05:45:02 PM	1845.400 PSIA	
56	Apr 08, 2010 05:50:01 PM	1867.200 PSIA	
57	Apr 08, 2010 05:55:02 PM	1858.400 PSIA	
58	Apr 08, 2010 06:00:02 PM	1868.400 PSIA	
59	Apr 08, 2010 06:05:03 PM	1873.000 PSIA	
60	Apr 08, 2010 06:10:02 PM	1869.400 PSIA	

61	Apr 08, 2010 06:15:03 PM	1874.800	PSIA
62	Apr 08, 2010 06:20:02 PM	1863.600	PSIA
63	Apr 08, 2010 06:25:02 PM	1865.000	PSIA
64	Apr 08, 2010 06:30:02 PM	1871.200	PSIA
65	Apr 08, 2010 06:35:02 PM	1872.000	PSIA
66	Apr 08, 2010 06:40:03 PM	1870.400	PSIA
67	Apr 08, 2010 06:45:02 PM	1877.000	PSIA
68	Apr 08, 2010 06:50:03 PM	1901.000	PSIA
69	Apr 08, 2010 06:55:01 PM	1905.000	PSIA
70	Apr 08, 2010 07:00:02 PM	1901.000	PSIA
71	Apr 08, 2010 07:05:02 PM	1895.200	PSIA
72	Apr 08, 2010 07:10:02 PM	1895.000	PSIA
73	Apr 08, 2010 07:15:03 PM	1889.000	PSIA
74	Apr 08, 2010 07:20:02 PM	1888.800	PSIA
75	Apr 08, 2010 07:25:03 PM	1900.800	PSIA
76	Apr 08, 2010 07:30:01 PM	1892.200	PSIA
77	Apr 08, 2010 07:35:02 PM	1888.400	PSIA
78	Apr 08, 2010 07:40:01 PM	1898.800	PSIA
79	Apr 08, 2010 07:45:02 PM	1897.800	PSIA


Sundance 15-32-8-18 ISIP (4-8-10)
Device - PrTemp1000
Serial Number - M75866
Device ID - PrTemp
PSIA
Absolute Pressure
2400
2225
2050
1875
1700
1525
1350
1175
1000
07:43:00 PM Apr 08, 2010 MDT
07:47:15 PM Apr 08, 2010 MDT
07:51:30 PM Apr 08, 2010 MDT
07:55:45 PM Apr 08, 2010 MDT
08:00:00 PM Apr 08, 2010 MDT
08:04:15 PM Apr 08, 2010 MDT
08:08:30 PM Apr 08, 2010 MDT
08:12:45 PM Apr 08, 2010 MDT
08:17:00 PM Apr 08, 2010 MDT

Report Name:	PrTemp1000 Data Table
Report Date:	Apr 09, 2010 08:49:01 AM MDT
File Name:	S:\Welinfo\PTC® Instruments 2.00\Sundance 15-32-8-18 ISIP (4-8-10).csv
Title:	Sundance 15-32-8-18 ISIP (4-8-10)
Device:	PrTemp1000 - Temperature and Pressure Recorder
Hardware Revision:	REV2C (64K)
Serial Number:	M75866
Device ID:	PrTemp
Data Start Date:	Apr 08, 2010 07:45:14 PM MDT
Data End Date:	Apr 08, 2010 08:15:15 PM MDT
Reading Rate:	2 Seconds
Readings:	1 to 31 of 31
Last Calibration Date:	May 22, 2009
Next Calibration Date:	May 22, 2010

Reading	Date and Time (MDT)	Absolute Pressure	Annotation
1	Apr 08, 2010 07:45:14 PM	1885.200 PSIA	
2	Apr 08, 2010 07:46:14 PM	1773.800 PSIA	
3	Apr 08, 2010 07:47:13 PM	1720.200 PSIA	
4	Apr 08, 2010 07:48:13 PM	1681.200 PSIA	
5	Apr 08, 2010 07:49:14 PM	1651.600 PSIA	
6	Apr 08, 2010 07:50:13 PM	1629.600 PSIA	
7	Apr 08, 2010 07:51:13 PM	1611.600 PSIA	
8	Apr 08, 2010 07:52:14 PM	1596.400 PSIA	
9	Apr 08, 2010 07:53:14 PM	1583.600 PSIA	
10	Apr 08, 2010 07:54:13 PM	1572.400 PSIA	
11	Apr 08, 2010 07:55:14 PM	1562.600 PSIA	
12	Apr 08, 2010 07:56:14 PM	1553.800 PSIA	
13	Apr 08, 2010 07:57:13 PM	1547.200 PSIA	
14	Apr 08, 2010 07:58:14 PM	1540.600 PSIA	
15	Apr 08, 2010 07:59:14 PM	1534.200 PSIA	
16	Apr 08, 2010 08:00:13 PM	1529.200 PSIA	
17	Apr 08, 2010 08:01:13 PM	1524.800 PSIA	
18	Apr 08, 2010 08:02:14 PM	1520.000 PSIA	
19	Apr 08, 2010 08:03:14 PM	1515.800 PSIA	
20	Apr 08, 2010 08:04:13 PM	1511.600 PSIA	
21	Apr 08, 2010 08:05:14 PM	1508.800 PSIA	
22	Apr 08, 2010 08:06:14 PM	1505.400 PSIA	
23	Apr 08, 2010 08:07:13 PM	1502.600 PSIA	
24	Apr 08, 2010 08:08:15 PM	1498.800 PSIA	
25	Apr 08, 2010 08:09:14 PM	1496.200 PSIA	
26	Apr 08, 2010 08:10:14 PM	1493.400 PSIA	
27	Apr 08, 2010 08:11:15 PM	1491.200 PSIA	
28	Apr 08, 2010 08:12:14 PM	1489.600 PSIA	
29	Apr 08, 2010 08:13:14 PM	1486.800 PSIA	
30	Apr 08, 2010 08:14:14 PM	1484.800 PSIA	
31	Apr 08, 2010 08:15:15 PM	1482.400 PSIA	

Sundance 15-32-8-18 Rate Sheet (4-8-10)

Step # 1	Time:	1:50	1:55	2:00	2:05	2:10	2:15
	Rate:	350.6	350.6	350.6	350.5	350.5	350.5
	Time:	2:20	2:25	2:30	2:35	2:40	2:45
	Rate:	350.5	350.5	350.5	350.5	350.4	350.4
Step # 2	Time:	2:50	2:55	3:00	3:05	3:10	3:15
	Rate:	700.4	700.4	700.4	700.4	700.4	700.3
	Time:	3:20	3:25	3:30	3:35	3:40	3:45
	Rate:	700.3	700.3	700.3	700.2	700.2	700.2
Step # 3	Time:	3:50	3:55	4:00	4:05	4:10	4:15
	Rate:	1050.4	1050.4	1050.4	1050.4	1050.3	1050.3
	Time:	4:20	4:25	4:30	4:35	4:40	4:45
	Rate:	1050.3	1050.3	1050.2	1050.2	1050.2	1050.2
Step # 4	Time:	4:50	4:55	5:00	5:05	5:10	5:15
	Rate:	1400.5	1400.5	1400.4	1400.4	1400.4	1400.3
	Time:	5:20	5:25	5:30	5:35	5:40	5:45
	Rate:	1400.3	1400.3	1400.3	1400.3	1400.2	1400.2
Step # 5	Time:	5:50	5:55	6:00	6:05	6:10	6:15
	Rate:	1750.6	1750.6	1750.6	1750.6	1750.5	1750.5
	Time:	6:20	6:25	6:30	6:35	6:40	6:45
	Rate:	1750.5	1750.4	1750.4	1750.3	1750.2	1750.2
Step # 6	Time:	6:50	6:55	7:00	7:05	7:10	7:15
	Rate:	2100.4	2100.4	2100.4	2100.4	2100.3	2100.3
	Time:	7:20	7:25	7:30	7:35	7:40	7:45
	Rate:	2100.3	2100.2	2100.1	2100.1	2100.1	2100

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: ML-22058

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)

1. TYPE OF WELL Water Injection Well

8. WELL NAME and NUMBER: SUNDANCE 15-32-8-18

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 43047344650000

3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052

PHONE NUMBER: 435 646-4825 Ext

9. FIELD and POOL or WILDCAT: 8 MILE FLAT NORTH

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0552 FSL 2191 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 32 Township: 08.0S Range: 18.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT — Approximate date work will start:
- ☑ SUBSEQUENT REPORT — Date of Work Completion: 1/17/2012
- ☐ SPUD REPORT — Date of Spud:
- ☐ DRILLING REPORT — Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	☑ OTHER	OTHER: 5 YR MIT

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 11/16/2011 Nathan Wiser with the EPA was contacted concerning the 5 year MIT on the above listed well. On 01/17/2012 the casing was pressured up to 1155 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tubing pressure was 1692 psig during the test. There was not an EPA representative available to witness the test. EPA# UT21034-07040

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
January 26, 2012

NAME (PLEASE PRINT) Lucy Chavez-Naupoto	**PHONE NUMBER** 435 646-4874	**TITLE** Water Services Technician
SIGNATURE N/A		**DATE** 1/19/2012

RECEIVED: Jan. 19, 2012

Mechanical Integrity Test
Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency
Underground Injection Control Program
999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness: _____ Date: 1/17/12
Test conducted by: Lynn Monsen
Others present: _____

Well Name: Sundance 15-32-8-18 Type: ER SWD Status: AC TA UC
Field: Monument Butte
Location: SW/SE Sec: 32 T 8 N/S R 18 E/W County: Uintah State: UT
Operator: NewField
Last MIT: ___/___/___ Maximum Allowable Pressure: _____ PSIG

Is this a regularly scheduled test? [X] Yes [ ] No
Initial test for permit? [ ] Yes [X] No
Test after well rework? [ ] Yes [X] No
Well injecting during test? [ ] Yes [X] No If Yes, rate: _____ bpd

Pre-test casing/tubing annulus pressure: 0 psig

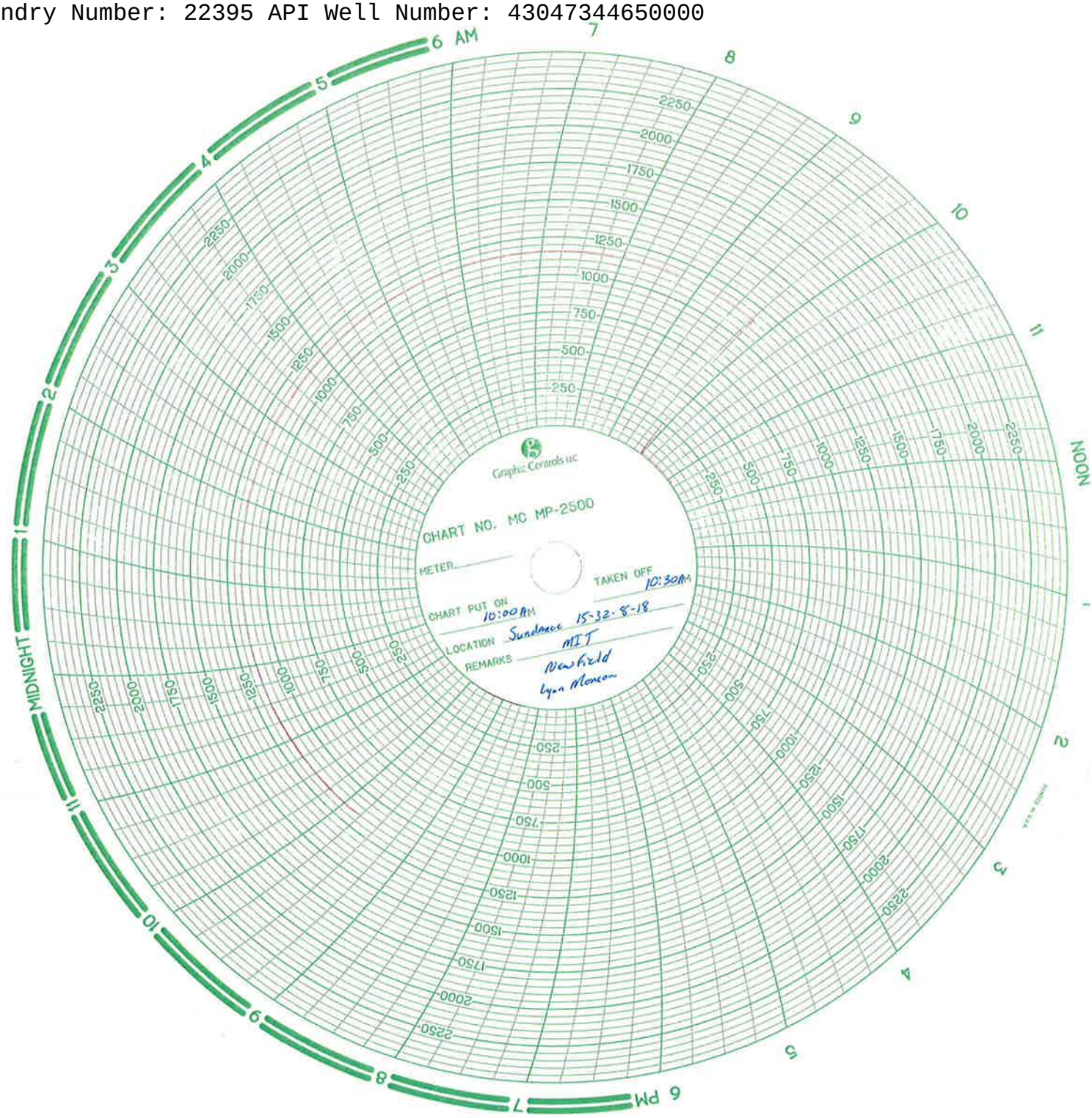
MIT DATA TABLE	Test #1	Test #2	Test #3
TUBING	*PRESSURE*		
Initial Pressure	1692 psig	psig	psig
End of test pressure	1692 psig	psig	psig
CASING / TUBING	*ANNULUS*	*PRESSURE*	
0 minutes	1155 psig	psig	psig
5 minutes	1155 psig	psig	psig
10 minutes	1155 psig	psig	psig
15 minutes	1155 psig	psig	psig
20 minutes	1155 psig	psig	psig
25 minutes	1155 psig	psig	psig
30 minutes	1155 psig	psig	psig
___ minutes	psig	psig	psig
___ minutes	psig	psig	psig
RESULT	[X] Pass [ ] Fail	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail

Does the annulus pressure build back up after the test ? [ ] Yes [X] No

MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: _____


Graphic Controls LLC
CHART NO. MC MP-2500
METER
CHART PUT ON 10:00 AM
TAKEN OFF 10:30 AM
LOCATION Sundance 15-32-8-18
REMARKS MIT
New Field
Lynn Monson
6 AM
NOON
6 PM
MIDNIGHT

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: ML-22058

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)

1. TYPE OF WELL Water Injection Well

8. WELL NAME and NUMBER: SUNDANCE 15-32-8-18

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 43047344650000

3. ADDRESS OF OPERATOR: 1001 17th Street, Suite 2000 , Denver, CO, 80202

PHONE NUMBER: 303 382-4443 Ext

9. FIELD and POOL or WILDCAT: 8 MILE FLAT NORTH

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0552 FSL 2191 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 32 Township: 08.0S Range: 18.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

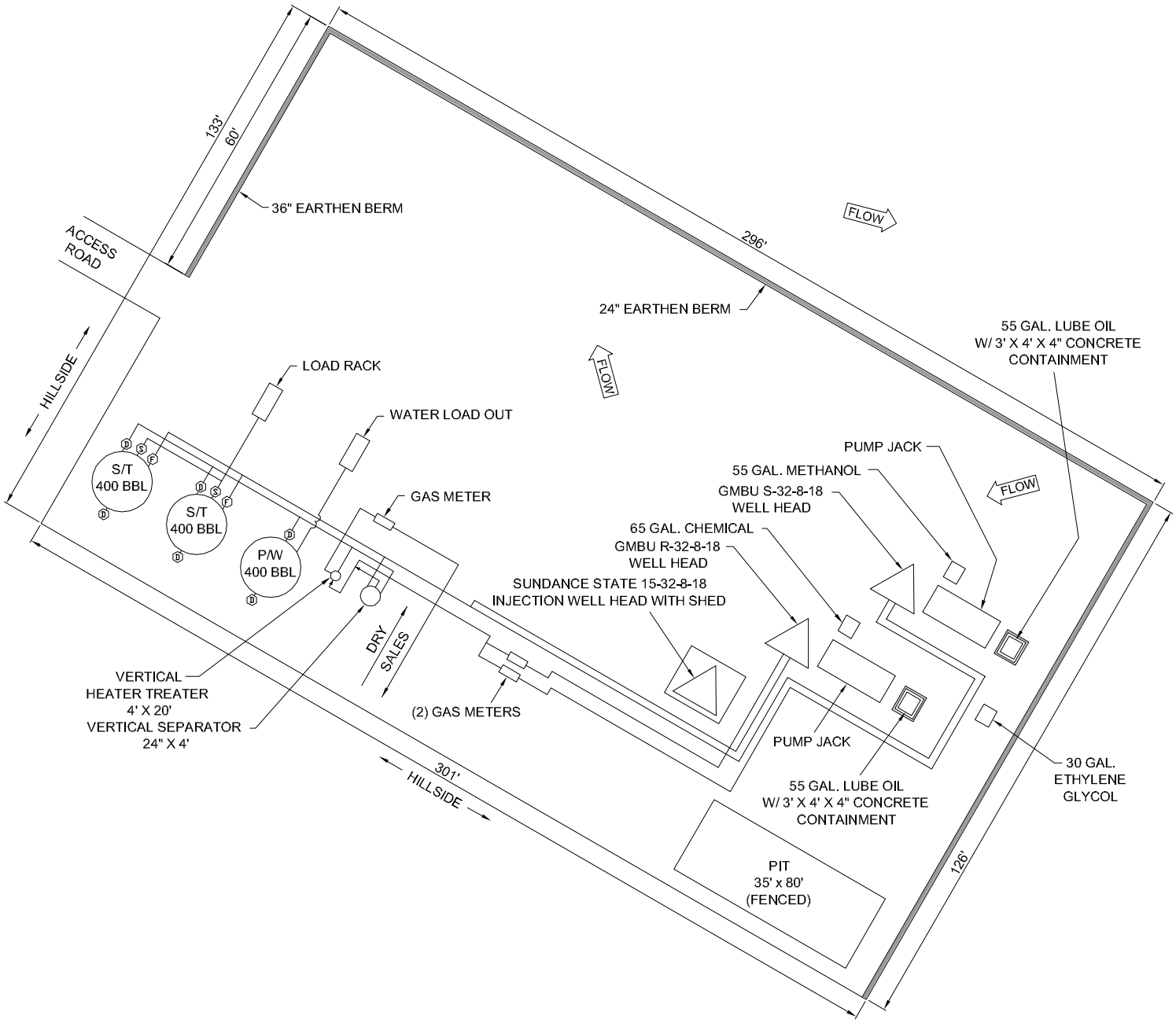
TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
✓ SUBSEQUENT REPORT Date of Work Completion: 4/1/2013	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Site Facility/Site Security

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

SEE ATTACHED REVISED SITE FACILITY DIAGRAM

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
May 01, 2013

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jill L Loyle	303 383-4135	Regulatory Technician
SIGNATURE		**DATE**
N/A		4/22/2013



POSITION OF VALVES AND USE OF SEALS DURING PRODUCTION

Valve	Line Purpose	Position	Seal Installed
D	Drain	Closed	Yes
F	Oil, Gas, Water	Open	No
O	Overflow	Open/Closed	No
V	Vent	Open	No
R	Recycle	Closed	Yes
B	Blowdown	Open/Closed	No
S	Sales	Closed	Yes

Valve Type
D - Drain Valve
F - Flow Valve
O - Overflow
V - Vent
R - Recycle
B - Blow Down
S - Sales Valve

Federal Lease #: UTU-87538X
API #:

This lease is subject to the Site Security Plan for:
Newfield Exploration Company
19 East Pine Street
Pinedale, WY 82941

SUNDANCE STATE 15-32-8-18,
GMBU R-32-8-18 AND GMBU S-32-8-18

Newfield Exploration Company
SWSE Sec 32, T8S, R18E
Uintah County, UT

M.G. | OCT 2012

POSITION OF VALVES AND USE OF SEALS DURING SALES

Valve	Line Purpose	Position	Seal Installed
D	Drain	Closed	Yes
F	Oil, Gas, Water	Closed	Yes
O	Overflow	Closed	Yes
V	Vent	Open	No
R	Recycle	Closed	Yes
B	Blowdown	Closed	No
S	Sales	Open	No

POSITION OF VALVES AND USE OF SEALS DURING WATER DRAIN

Valve	Line Purpose	Position	Seal Installed
D	Drain	Open	No
F	Oil, Gas, Water	Closed	No
O	Overflow	Closed	No
V	Vent	Open	No
R	Recycle	Closed	Yes
B	Blowdown	Closed	No
S	Sales	Closed	Yes

KLEINFELDER
Bright People. Right Solutions.

Note: This drawing represents approximate sizes and distances. Underground pipeline locations are also approximated.

RECEIVED: Apr. 22, 2013

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)

1. TYPE OF WELL Water Injection Well

8. WELL NAME and NUMBER: SUNDANCE 15-32-8-18

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 43047344650000

3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052

PHONE NUMBER: 435 646-4825 Ext

9. FIELD and POOL or WILDCAT: 8 MILE FLAT NORTH

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0552 FSL 2191 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 32 Township: 08.0S Range: 18.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
✓ SUBSEQUENT REPORT Date of Work Completion: 12/14/2016	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: 5 YR MIT

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

5 YR MIT performed on the above listed well. On 12/14/2016 the casing was pressured up to 1042 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbg pressure was 1423 psig during the test. There was not an EPA representative available to witness the test. EPA #UT22197-07040

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
December 28, 2016

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Lucy Chavez-Naupoto	435 646-4874	Water Services Technician
SIGNATURE N/A		**DATE** 12/15/2016

RECEIVED: Dec. 15, 2016

Mechanical Integrity Test
Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency
Underground Injection Control Program
999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness: _____ Date: 12 / 14 / 16
Test conducted by: Hal Richins
Others present: _____

-07040

Well Name: Sundance 15-32-8-18 Type: ER SWD Status: AC TA UC
Field: Monument Butte
Location: 15 Sec: 32 T 8 N (S) R 18 (E) W County: Uintah State: Utah
Operator: Hal Richins
Last MIT: / /2011 Maximum Allowable Pressure: _____ PSIG

Is this a regularly scheduled test? [ ] Yes [ ] No
Initial test for permit? [ ] Yes [ ] No
Test after well rework? [ ] Yes [ ] No
Well injecting during test? [ ] Yes [ ] No If Yes, rate: _____ bpd

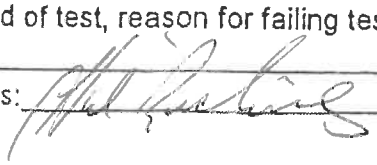
Pre-test casing/tubing annulus pressure: 1423 / 0 psig

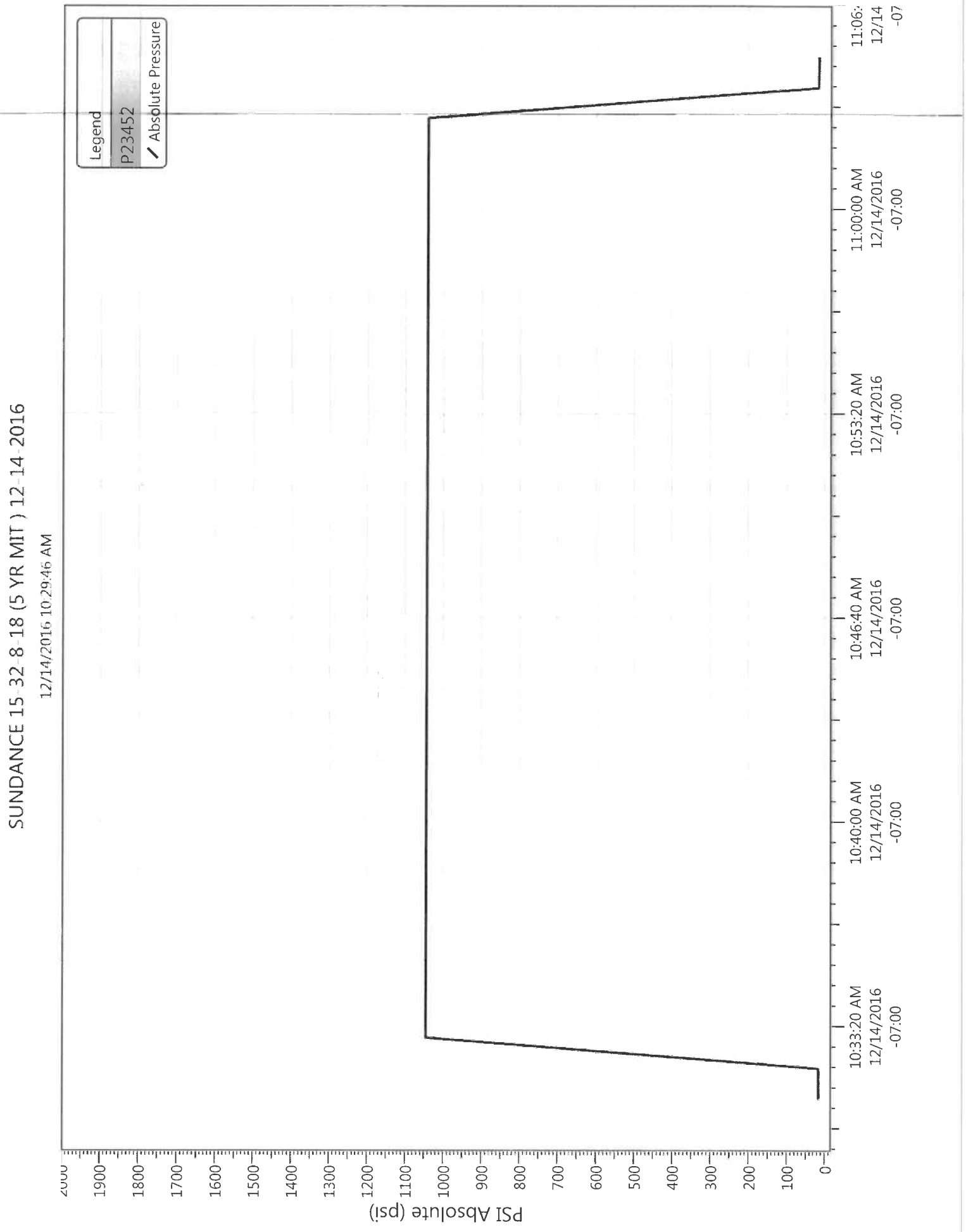
MIT DATA TABLE	Test #1	Test #2	Test #3
TUBING	*PRESSURE*		
Initial Pressure	1423 psig	psig	psig
End of test pressure	psig	psig	psig
CASING / TUBING	*ANNULUS*	*PRESSURE*	
0 minutes	1044.8 psig	psig	psig
5 minutes	1043.6 psig	psig	psig
10 minutes	1043.0 psig	psig	psig
15 minutes	1042.6 psig	psig	psig
20 minutes	1041.8 psig	psig	psig
25 minutes	1041.6 psig	psig	psig
30 minutes	1041.6 psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
RESULT	[X] Pass [ ] Fail	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail

Does the annulus pressure build back up after the test ? [ ] Yes [ ] No

MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: 


SUNDANCE 15-32-8-18 (5 YR MIT) 12-14-2016
12/14/2016 10:29:46 AM
Legend
P23452
Absolute Pressure
PSI Absolute (psi)
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
10:33:20 AM
12/14/2016
-07:00
10:40:00 AM
12/14/2016
-07:00
10:46:40 AM
12/14/2016
-07:00
10:53:20 AM
12/14/2016
-07:00
11:00:00 AM
12/14/2016
-07:00
11:06:
12/14
-07

Sundance 15-32-8-18

Spud Date: 12/2/03
Put on Production: 1/14/04
GL: 4909' KB: 4921'

Initial Production: 81 BOPD,
39 MCFD, 14 BWPD

Injection Wellbore
Diagram

SURFACE CASING

CSG SIZE: 8-5/8"
GRADE: J-55
WEIGHT: 24#
LENGTH: 7 jts. (301.14')
DEPTH LANDED: 311.14' KB
HOLE SIZE: 12-1/4"
CEMENT DATA: 150 sxs Class G cmt, est 4 bbls cmt to surf.

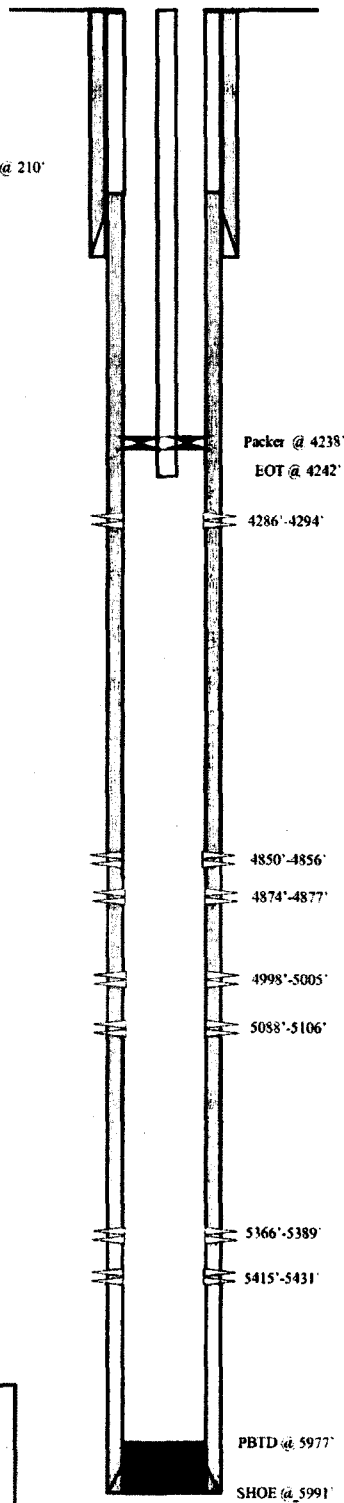
Cement Top @ 210'

PRODUCTION CASING

CSG SIZE: 5-1/2"
GRADE: J-55
WEIGHT: 15.5#
LENGTH: 136 jts. (5992.96')
DEPTH LANDED: 5990.96' KB
HOLE SIZE: 7-7/8"
CEMENT DATA: 300 sxs Prem. Lite II & 400 sxs 50/50 POZ.
CEMENT TOP AT: 210'

TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#
NO. OF JOINTS: 137 jts (4221.79')
SEATING NIPPLE: 2-7/8" (1.10')
SN LANDED AT: 4233.79' KB
PACKER CE @: 4237.99'
TOTAL STRING LENGTH: EOT @ 4242.24' W/12 'KB



FRAC JOB

1/05/04	5366'-5431'	**Frac LODC sands as follows:** 119,038# 20/40 sand in 847 bbls Lightning frac 17 fluid. Treated @ avg press of 2250 psi w/avg rate of 24.4 BPM. ISIP 2580 psi. Calc flush: 5364 gal. Actual flush: 5376 gal.
1/05/04	5088'-5106'	**Frac B1 sands as follows:** 79,264# 20/40 sand in 595 bbls Lightning frac 17 fluid. Treated @ avg press of 1424 psi w/avg rate of 24.4 BPM. ISIP 1900 psi. Calc. flush: 5086 gal. Actual flush: 5124 gal.
1/08/04	4998'-5005'	**Frac C sands as follows:** 24,358# 20/40 sand in 275 bbls Lightning frac 17 fluid. Treated @ avg press of 2200 psi w/avg rate of 24.7 BPM. ISIP 2330 psi. Calc. flush: 4996 gal. Actual flush: 4998 gal.
1/08/04	4850'-4877'	**Frac D2 sands as follows:** 30,775# 20/40 sand in 342 bbls Lightning frac 17 fluid. Treated @ avg press of 3120 psi w/avg rate of 26 BPM. ISIP 2080 psi. Calc. flush: 4848 gal. Actual flush: 4847 gal.
1/08/04	4286'-4294'	**Frac GB4 sands as follows:** 34,240# 20/40 sand in 321 bbls Lightning frac 17 fluid. Treated @ avg press of 2450 psi w/avg rate of 24.7 BPM. ISIP 2020 psi. Calc. flush: 4284 gal. Actual flush: 4200 gal.
07/20/05		Pump Change
10/14/05		Pump Change. Detail tubing and Rod Update
1/31/07		**Well converted to an Injection Well.**

PERFORATION RECORD

12/31/03	5415'-5431'	2 JSPF	32 holes
12/31/03	5366'-5389'	2 JSPF	46 holes
1/05/04	5088'-5106'	4 JSPF	72 holes
1/08/04	4998'-5005'	4 JSPF	28 holes
1/08/04	4874'-4877'	4 JSPF	12 holes
1/08/04	4850'-4856'	4 JSPF	24 holes
1/08/04	4286'-4294'	4 JSPF	32 holes

NEWFIELD

Sundance 15-32-8-18

552' FSL & 2191' FEL

SWSE Section 32-T8S-R18E

Uintah Co, Utah

API #43-047-34465; Lease #ML-22058